

PROJECT - 3

DEPLOY FLASK/PYTHON WEB

APPLICATION IN AWS CLOUD

- what is flask !

Flask is a web application framework written in Python. It was developed by Armin Ronacher, who led a team of international Python enthusiasts called Pococco.

- what is python !

Python is an interpreted, object-oriented, high-level programming language with dynamic semantics. Its high-level built-in data structures, combined with ...

- what is pip !

What is PIP? ... PIP is a package manager for Python packages, or modules if you like. Note: If you have Python version 3.4 or later, PIP is included by default.

PRE - REQUISITES

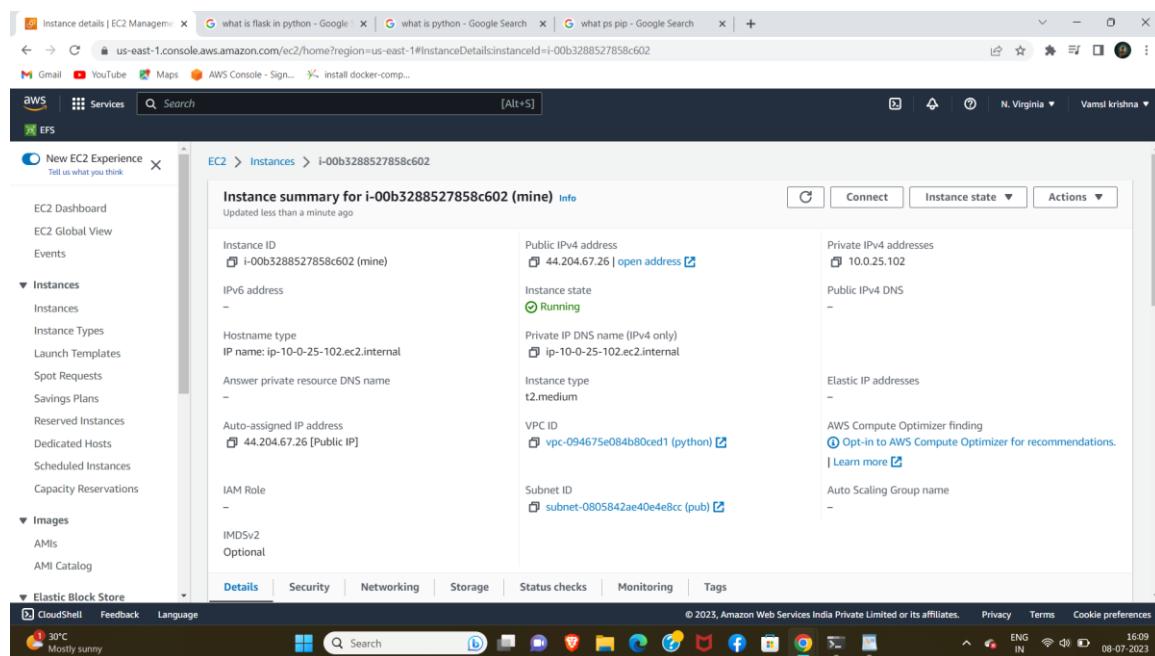
1. Aws account
2. vpc
3. ec2 instance
4. github
5. git bash / terminal
6. basic understanding of python/flask
7. terraform
8. jenkins

STEP - BY - STEP - PROCEDURE

[WORK FLOW]

STEP - 1

1. create ec2 instance using t2 medium & vpc flow



2.connect to terminal

EC2 > Instances > i-00b3288527858c602 > Connect to instance

Connect to instance info

Connect to your instance i-00b3288527858c602 (mine) using any of these options

- EC2 Instance Connect
- Session Manager
- SSH client**
- EC2 serial console

Instance ID
i-00b3288527858c602 (mine)

- Open an SSH client.
- Locate your private key file. The key used to launch this instance is nani.pem
- Run this command, if necessary, to ensure your key is not publicly viewable.
chmod 400 nani.pem
- Connect to your instance using its Public IP:
44.204.67.26

Command copied

```
ssh -i "nani.pem" ubuntu@44.204.67.26
```

Note: In most cases, the guessed user name is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI user name.

CloudShell Feedback Language

30°C Mostly sunny

Search

© 2023, Amazon Web Services India Private Limited or its affiliates. Privacy Terms Cookie preferences ENG IN 16:09 08-07-2023

```
ubuntu@ip-10-0-25-102:~ + ~
PS C:\Users\gandh\Downloads> ssh -i "nani.pem" ubuntu@44.204.67.26
Welcome to Ubuntu 22.04.2 LTS (GNU/Linux 5.19.0-1025-aws x86_64)

 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
 * Support: https://ubuntu.com/advantage

 System information as of Sat Jul 8 10:40:34 UTC 2023

 System load: 0.0 Processes: 116
 Usage of /: 30.1% of 7.57GB Users logged in: 1
 Memory usage: 10%
 Swap usage: 0%

=> There is 1 zombie process.

 Expanded Security Maintenance for Applications is not enabled.

 77 updates can be applied immediately.
 50 of these updates are standard security updates.
 To see these additional updates run: apt list --upgradable

 Enable ESM Apps to receive additional future security updates.
 See https://ubuntu.com/esm or run: sudo pro status

 *** System restart required ***
 Last login: Sat Jul 8 10:40:35 2023 from 120.88.40.181
ubuntu@ip-10-0-25-102:~$
```

30°C Mostly sunny

Search

ENG IN 16:11 08-07-2023

3. update & upgrade & full - upgrade


```

ubuntu@ip-10-0-25-102:~ + ~
Sourcing file '/etc/default/grub'
Sourcing file '/etc/default/grub.d/40-force-partuuid.cfg'
Sourcing file '/etc/default/grub.d/50-cloudimg-settings.cfg'
Sourcing file '/etc/default/grub.d/init-select.cfg'
Generating grub configuration file ...
GRUB_FORCE_PARTUUID is set, will attempt initrdless boot
Found linux image: /boot/vmlinuz-5.19.0-1028-aws
Found initrd image: /boot/microcode.cpio /boot/initrd.img-5.19.0-1028-aws
Found linux image: /boot/vmlinuz-5.19.0-1025-aws
Found initrd image: /boot/microcode.cpio /boot/initrd.img-5.19.0-1025-aws
Warning: os-prober will not be executed to detect other bootable partitions.
Systems on them will not be added to the GRUB boot configuration.
Check GRUB_DISABLE_OS_PROBER documentation entry.
done
Scanning processes...
Scanning candidates...
Scanning linux images...

Restarting services...
/etc/needrestart/restart.d/systemd-manager
systemctl restart chrony.service irqbalance.service multipathd.service packagekit.service polkit.service rsyslog.service ssh.service systemd-journald.service
systemd-networkd.service systemd-resolved.service systemd-udevd.service
Service restarts being deferred:
/etc/needrestart/restart.d/dbus.service
systemctl restart networkd-dispatcher.service
systemctl restart unattended-upgrades.service
systemctl restart user@1000.service

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-10-0-25-102:~$ sudo apt install python3-pip
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
python3-pip is already the newest version (22.0.2+dfsg-1ubuntu0.3).
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
ubuntu@ip-10-0-25-102:~$ |

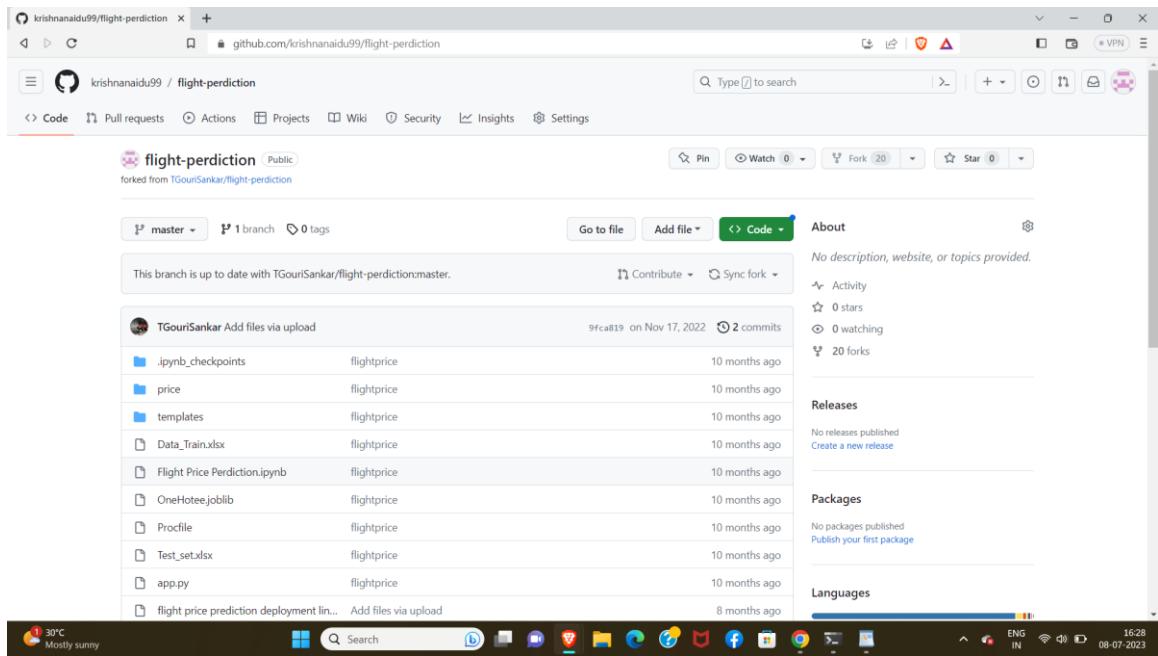
```

30°C Mostly sunny

Search

ENG IN 16:26 08-07-2023

5.go to github python repo and clone the repo and go into the directory



```

done
Scanning processes...
Scanning candidates...
Scanning linux images...

Restarting services...
/etc/needrestart/restart.d/systemd-manager
systemctl restart chrony.service irqbalance.service multipathd.service packagekit.service polkit.service rsyslog.service ssh.service systemd-journald.service
systemd-networkd.service systemd-resolved.service systemd-udevd.service
Service restarts being deferred:
/etc/needrestart/restart.d/dbus.service
systemctl restart networkd-dispatcher.service
systemctl restart unattended-upgrades.service
systemctl restart user@1000.service

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-10-0-25-102:~$ sudo apt install python3-pip
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
python3-pip is already the newest version (22.0.2+dfsg-1ubuntu0.3).
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
ubuntu@ip-10-0-25-102:~$ sudo git clone https://github.com/krishnaanandu99/flight-perdiction.git
Cloning into 'flight-perdiction'...
remote: Enumerating objects: 10819, done.
remote: Counting objects: 100% (3/3), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 10819 (delta 0), reused 0 (delta 0), pack-reused 10816
Receiving objects: 100% (10819/10819), 84.48 MiB | 26.54 MiB/s, done.
Resolving deltas: 100% (871/871), done.
Updating files: 100% (10351/10351), done.
ubuntu@ip-10-0-25-102:~$ cd flight-perdiction/
ubuntu@ip-10-0-25-102:~/flight-perdiction$ ls
Data_Train.xlsx          OneHotEnc.joblib  Test_set.xlsx  'flight price prediction deployment link.txt'  model.pkl  requirements.txt
'Flight Price Perdiction.ipynb'  Procfile    app.py      gitattributes                                price        templates
ubuntu@ip-10-0-25-102:~/flight-perdiction$ 

```

6. open app.py file using vi command and change port & cidr like [0.0.0.0 & 9000]

```

import numpy as np
import pandas as pd
import joblib
import pickle

app = Flask(__name__)

model = joblib.load('model.pkl')
onehot = joblib.load('OneHotEnc.joblib')

@app.route('/')
@app.route('/home')
def main():
    return render_template('home.html')

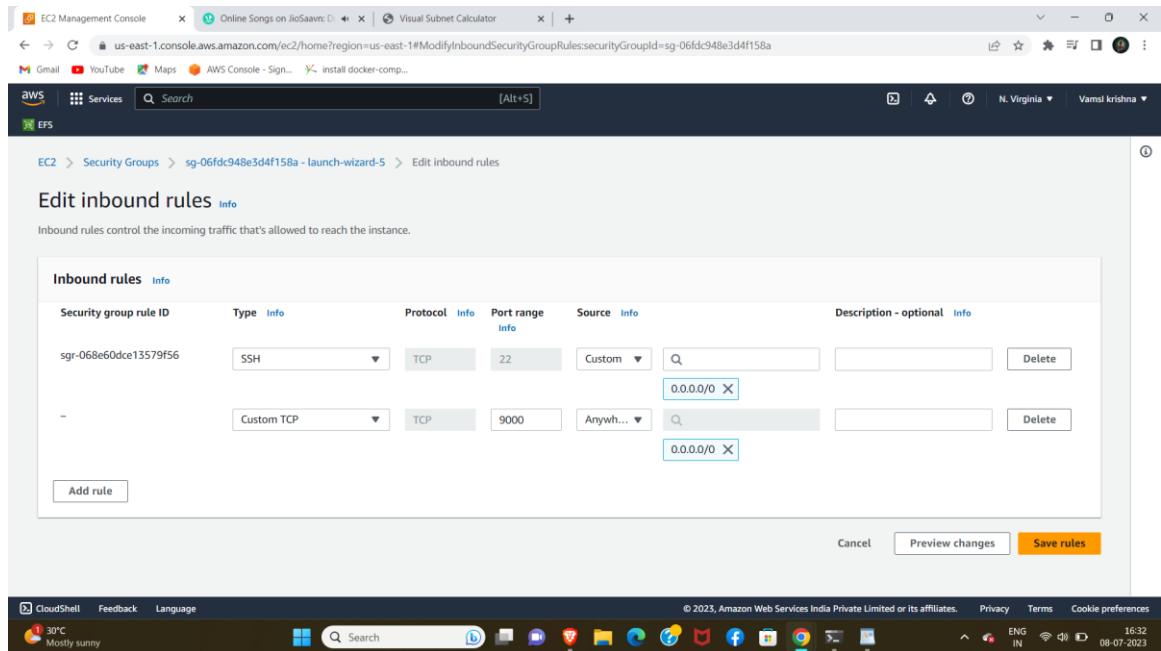
@app.route('/predict',methods=['POST'])
def predict():
    int_features = [x for x in request.form.values()]
    c = ["Airline","Source","Destination","Total_Stops","month","day"]
    df = pd.DataFrame(int_features,columns=c)
    l = onehot.transform(df.iloc[:,1:])
    c = onehot.get_feature_names_out()
    t = pd.DataFrame(l,columns=c)
    l2 = df.iloc[:,0:1]
    final = pd.concat([l2,t],axis=1)
    result = model.predict(final)
    print("The Result is : ",result)

    print(int_features)
    return render_template("home.html",prediction_text="Flight Price Perdiction is : {}".format(result))

if __name__ == "__main__":
    app.debug=True
    app.run(host = '0.0.0.0', port = 9000)
-- INSERT --

```

7. goto security groups and assain port 9000



8. install requirements.txt using [pip3 install -r requirements.txt]

```
ubuntu@ip-10-0-25-102:~/flights$ pip3 install -r requirements.txt
Defaulting to user installation because normal site-packages is not writeable
Collecting click==8.1.3
  Downloading click-8.1.3-py3-none-any.whl (96 kB)
Collecting colorama==0.4.5
  Downloading colorama-0.4.5-py2.py3-none-any.whl (16 kB)
Collecting Flask==2.2.2
  Downloading Flask-2.2.2-py3-none-any.whl (101 kB)
Collecting importlib-metadata==4.12.0
  Downloading importlib_metadata-4.12.0-py3-none-any.whl (21 kB)
Collecting itsdangerous==2.1.2
  Downloading itsdangerous-2.1.2-py3-none-any.whl (15 kB)
Collecting Jinja2==3.1.2
  Downloading Jinja2-3.1.2-py3-none-any.whl (133 kB)
Collecting joblib==1.1.0
  Downloading joblib-1.1.0-py2.py3-none-any.whl (306 kB)
Collecting MarkupSafe==2.1.1
  Downloading MarkupSafe-2.1.1-cp310-cp310-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (25 kB)
Collecting numpy==1.23.2
  Downloading numpy-1.23.2-cp310-cp310-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (17.0 MB)
Collecting pandas==1.4.4
  Downloading pandas-1.4.4-cp310-cp310-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (11.6 MB)
Collecting python-dateutil==2.8.2
  Downloading python_dateutil-2.8.2-py2.py3-none-any.whl (247 kB)
Collecting pytz==2022.2.1
  Downloading pytz-2022.2.1-py2.py3-none-any.whl (500 kB)
Collecting scikit-learn==1.1.2
  Downloading scikit_learn-1.1.2-cp310-cp310-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (30.5 MB)
Collecting scipy==1.9.1
  Downloading scipy-1.9.1-cp310-cp310-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (43.9 MB)
```

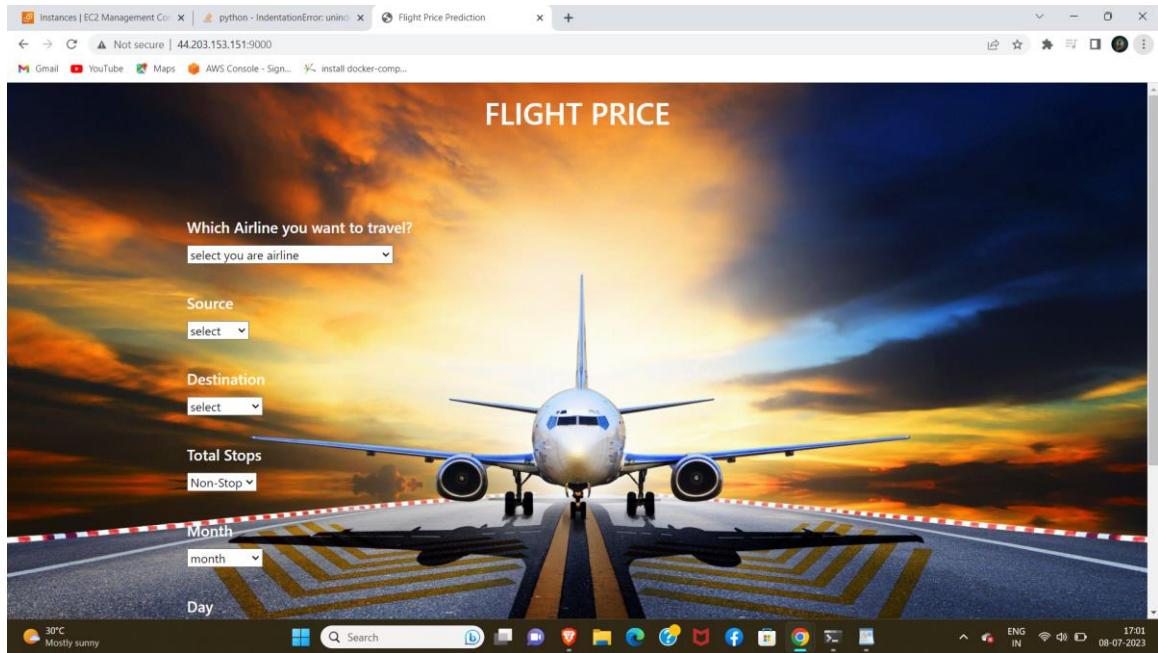
9. apply flask using [python3 app.py] and output show after stop the instance using screen command [screen -m -d python3 app.py]

```

ubuntu@ip-10-0-25-102:~/flights$ pip install -r requirements.txt
  Downloading threadpoolctl-3.1.0-py3-none-any.whl (14 kB)
    Collecting Werkzeug==2.2.2
      Downloading Werkzeug-2.2.2-py3-none-any.whl (232 kB) 232.7/232.7 KB 31.7 MB/s eta 0:00:00
    Collecting zipp==3.8.1
      Downloading zipp-3.8.1-py3-none-any.whl (5.6 kB)
    Collecting gunicorn==20.0.4
      Downloading gunicorn-20.0.4-py3-none-any.whl (77 kB) 77.9/77.9 KB 12.9 MB/s eta 0:00:00
Requirement already satisfied: setuptools>=3.0 in /usr/lib/python3/dist-packages (from gunicorn==20.0.4->r requirements.txt (line 20)) (59.6.0)
Building wheels for collected packages: sklearn
  Building wheel for sklearn (setup.py) ... done
    Created wheel for sklearn: filename=sklearn-0.0-py2.py3-none-any.whl size=1310 sha256=59152d50ed968b7a320c1612fb88f243a516756b3de236199d830b087b66188
    Stored in directory: /home/ubuntu/.cache/pip/wheels/9b/13/01/6f3a7fd641f90e1f6c8c7cded057f3394f451f340371c68f3d
Successfully built sklearn
Installing collected packages: pytz, zipp, threadpoolctl, python-dateutil, numpy, MarkupSafe, jobjlib, itsdangerous, gunicorn, colorama, click, Werkzeug, sci-py, pandas, Jinja2, importlib-metadata, scikit-learn, Flask, sklearn
  WARNING: The scripts f2py, f2py3 and f2py3_18 are installed in '/home/ubuntu/local/bin' which is not on PATH.
  Consider adding this directory to PATH or, if you prefer to suppress this warning, use --no-warn-script-location.
  WARNING: The script gunicorn is installed in '/home/ubuntu/local/bin' which is not on PATH.
  Consider adding this directory to PATH or, if you prefer to suppress this warning, use --no-warn-script-location.
  WARNING: The script flask is installed in '/home/ubuntu/local/bin' which is not on PATH.
  Consider adding this directory to PATH or, if you prefer to suppress this warning, use --no-warn-script-location.
  Consider adding this directory to PATH or, if you prefer to suppress this warning, use --no-warn-script-location.
Successfully installed Flask-2.2.2 Jinja2-3.1.2 MarkupSafe-2.1.1 Werkzeug-2.2.2 click-8.1.3 colorama-0.4.5 gunicorn-20.0.4 importlib-metadata-4.12.0 itsdangerous-2.1.2 joblib-1.1.0 numpy-1.23.2 pandas-1.4.4 python-dateutil-2.8.2 pytz-2022.2.1 scikit-learn-1.1.2 scipy-1.9.1 sklearn-0.0 threadpoolctl-3.1.0 zipp-3.8.1
ubuntu@ip-10-0-25-102:~/flight-perdition$ python3 app.py
 * Serving Flask app 'app'
 * Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
 * Running on all addresses (0.0.0.0)
 * Running on http://127.0.0.1:9000
 * Running on http://10.0.25.102:9000
Press CTRL+C to quit
 * Restarting with stat
 * Debugger is active!
 * Debugger PIN: 307-219-750
c:\ubuntu\ip-10-0-25-102:~/flight-perdition$ screen -m -d python3 app.py
ubuntu@ip-10-0-25-102:~/flight-perdition$ |

```

10. browse the ip assain port 9000



STEP - 2

1. clone another repo for python [same process]

```

ubuntu@ip-10-0-25-102:~/flight-perdition$ pip3 install flask
Defaulting to user installation because normal site-packages is not writable
Requirement already satisfied: flask in /home/ubuntu/.local/lib/python3.10/site-packages (2.2.2)
Requirement already satisfied: Werkzeug>=2.2.2 in /home/ubuntu/.local/lib/python3.10/site-packages (from flask) (2.2.2)
Requirement already satisfied: Jinja2>=3.0 in /home/ubuntu/.local/lib/python3.10/site-packages (from flask) (3.1.2)
Requirement already satisfied: click>=8.0 in /home/ubuntu/.local/lib/python3.10/site-packages (from flask) (8.1.3)
Requirement already satisfied: itsdangerous>=2.0 in /home/ubuntu/.local/lib/python3.10/site-packages (from flask) (2.1.2)
Requirement already satisfied: MarkupSafe>=2.0 in /home/ubuntu/.local/lib/python3.10/site-packages (from Jinja2>=3.0->flask) (2.1.1)
ubuntu@ip-10-0-25-102:~/flight-perdition$ python3 app.py
 * Serving Flask app 'app'
 * Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
 * Running on all addresses (0.0.0.0)
 * Running on http://127.0.0.1:9000
 * Running on http://10.0.25.102:9000
Press CTRL+C to quit
 * Restarting with stat
 * Debugger is active!
 * Debugger PIN: 858-844-949
129.88.40.181 - - [08/Jul/2023 11:31:12] "GET / HTTP/1.1" 200 -
129.88.40.181 - - [08/Jul/2023 11:31:12] "GET /static/css/styles.css HTTP/1.1" 404 -
129.88.40.181 - - [08/Jul/2023 11:31:14] "GET /favicon.ico HTTP/1.1" 404 -
"Ubuntu@ip-10-0-25-102:~/flight-perdition$"
ubuntu@ip-10-0-25-102:~/flight-perdition$ screen -m -d python3 app.py
ubuntu@ip-10-0-25-102:~/flight-perdition$ cd
ubuntu@ip-10-0-25-102:~/fuel$ sudo git clone https://github.com/krishnaaidu99/fuel.git
Cloning into 'fuel'...
remote: Enumerating objects: 10495, done.
remote: Counting objects: 100% (10/10), done.
remote: Compressing objects: 100% (9/9), done.
remote: Total 10495 (delta 2), reused 3 (delta 0), pack-reused 10485
Receiving objects: 100% (10495/10495), 80.35 MiB | 23.08 MiB/s, done.
Resolving deltas: 100% (818/818), done.
Updating files: 100% (10013/10013), done.
ubuntu@ip-10-0-25-102:~/fuel$ cd/
ubuntu@ip-10-0-25-102:~/fuel$ ls
Fuel_Consumption.ipynb          'MY2022 Fuel Consumption Ratings.xlsx'  Procfile  env        regressor.pkl      templates
'MY2022 Fuel Consumption Ratings.csv'  OneHotee.joblib    app.py    gitattributes  requirements.txt
ubuntu@ip-10-0-25-102:~/fuel$ sudo vi app.py
ubuntu@ip-10-0-25-102:~/fuel$ "

```

Ubuntu 22.04 LTS desktop environment with a terminal window open. The terminal shows the installation of Flask, running the application, and cloning a GitHub repository named 'fuel'. The desktop bar at the bottom shows the date (08-07-2023), time (17:04), and system status.

2. open app.py and assain all traffic & 800 port

```

app = Flask(__name__)

model = joblib.load('regressor.pkl')
onehot = joblib.load('OneHotee.joblib')

@app.route('/')
@app.route('/main')
def main():
    return render_template('main.html')

@app.route('/predict',methods=['POST'])
def predict():
    int_features =[x for x in request.form.values()]
    print(" "*20)
    print(int_features)
    c = ['make','model','vehicle_class','transmission','fuel','engine','cylinder','co2','smokerating']
    df = pd.DataFrame(int_features,columns=c)
    print(" "*20)
    print(df)
    l = onehot.transform(df.iloc[:,1:])
    t = onehot.get_feature_names_out()
    t = pd.DataFrame(l,columns=t)
    final =pd.concat([l,t],axis=1)
    result = model.predict(final)
    print('The Result is :',result)

    print(int_features)
    return render_template("main.html",prediction_text="Your Vehicle Fuel Consumption is : {}".format(result))

if __name__ == "__main__":
    app.debug=True
    app.run(host = '0.0.0.0', port = 8000)

```

Ubuntu 22.04 LTS desktop environment with a terminal window open. The terminal shows the contents of app.py, which defines routes for the main page and prediction, and runs the Flask app on port 8000. The desktop bar at the bottom shows the date (08-07-2023), time (17:04), and system status.

3. goto securiry groups and assain port 8000

Inbound rules

Security group rule ID	Type	Protocol	Port range	Source	Description - optional
sgr-068e60dce13579f56	SSH	TCP	22	Custom	
sgr-042e2e9ffbd7cbf96	Custom TCP	TCP	9000	Custom	
-	Custom TCP	TCP	8000	Anywhere	

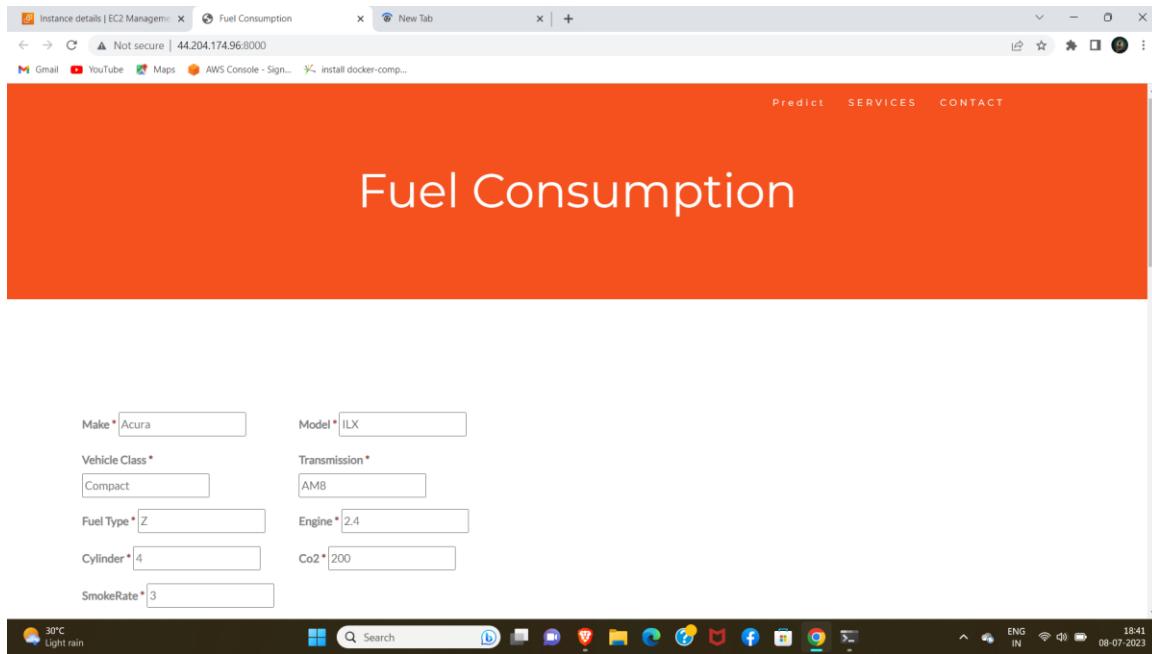
Add rule

4. install requirements.txt

```

Requirement already satisfied: zipp==3.8.1 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 19)) (3.8.1)
Requirement already satisfied: gunicorn==20.0.4 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 20)) (20.0.4)
Requirement already satisfied: setuptools>=3.0 in /usr/lib/python3/dist-packages (from gunicorn==20.0.4->-r requirements.txt (line 20)) (59.6.0)
ubuntu@ip-10-0-25-102:~/fuel$ sudo pip3 install -r requirements.txt
Collecting click==8.1.3
  Downloading click-8.1.3-py3-none-any.whl (96 kB) 96.6/96.6 kB 1.7 MB/s eta 0:00:00
Collecting colorama==0.4.5
  Downloading colorama-0.4.5-py2.py3-none-any.whl (16 kB)
Collecting Flask==2.2.2
  Downloading Flask-2.2.2-py3-none-any.whl (101 kB) 101.5/101.5 kB 5.5 MB/s eta 0:00:00
Collecting importlib-metadata==4.12.0
  Downloading importlib_metadata-4.12.0-py3-none-any.whl (21 kB)
Collecting itsdangerous==2.1.2
  Downloading itsdangerous-2.1.2-py3-none-any.whl (15 kB)
Collecting Jinja2==3.1.2
  Downloading Jinja2-3.1.2-py3-none-any.whl (133 kB) 133.1/133.1 kB 3.4 MB/s eta 0:00:00
Collecting joblib==1.1.0
  Downloading joblib-1.1.0-py2.py3-none-any.whl (306 kB) 307.0/307.0 kB 4.4 MB/s eta 0:00:00
Collecting MarkupSafe==2.1.1
  Downloading MarkupSafe-2.1.1-cp310-cp310-manylinux_2_17_x86_64_manylinux2014_x86_64.whl (25 kB)
Collecting numpy==1.23.2
  Downloading numpy-1.23.2-cp310-cp310-manylinux_2_17_x86_64_manylinux2014_x86_64.whl (17.0 MB) 17.0/17.0 MB 34.8 MB/s eta 0:00:00
Collecting pandas==1.4.4
  Downloading pandas-1.4.4-cp310-cp310-manylinux_2_17_x86_64_manylinux2014_x86_64.whl (11.6 MB) 11.6/11.6 MB 25.5 MB/s eta 0:00:00
Collecting python-dateutil==2.8.2
  Downloading python_dateutil-2.8.2-py2.py3-none-any.whl (247 kB) 247.7/247.7 kB 12.0 MB/s eta 0:00:00
Collecting pytz==2022.2.1
  Downloading pytz-2022.2.1-py3-none-any.whl (500 kB) 500.6/500.6 kB 22.0 MB/s eta 0:00:00
Collecting scikit-learn==1.1.2
  Downloading scikit_learn-1.1.2-cp310-cp310-manylinux_2_17_x86_64_manylinux2014_x86_64.whl (30.5 MB) 30.5/30.5 kB 23.1 MB/s eta 0:00:00
Collecting scipy==1.9.1
  
```

5. apply flask and browse ip assain 8000



STEP - 3

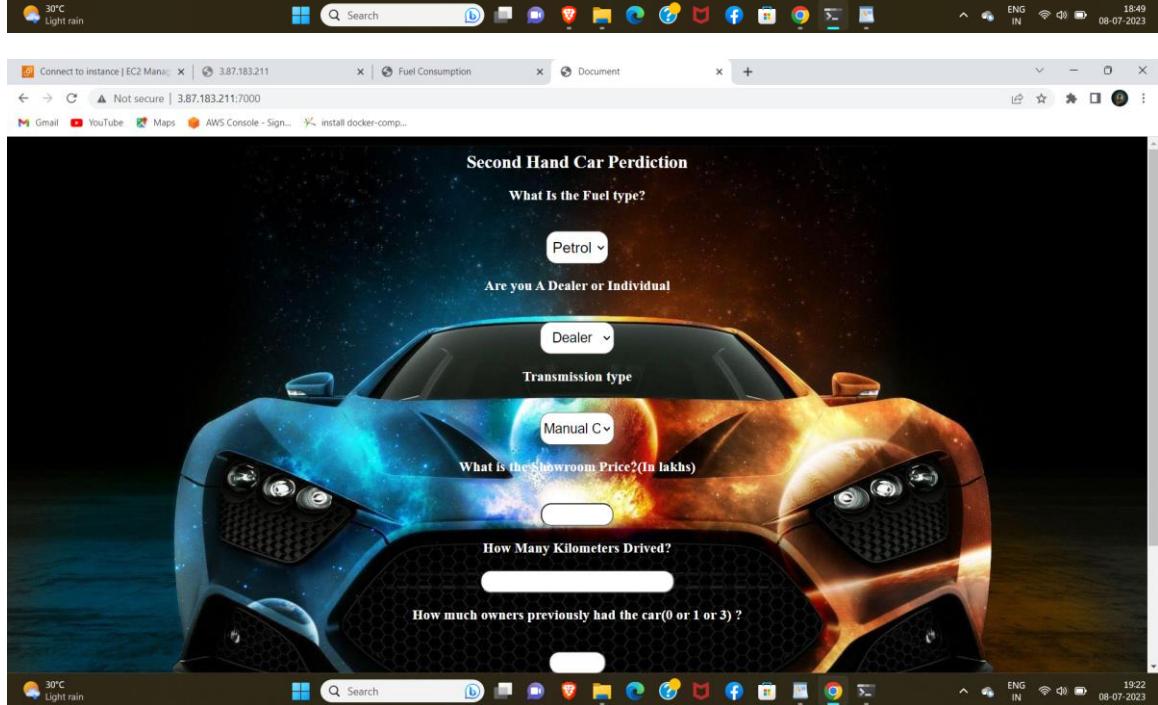
1. clone another repo and browse

```
ubuntu@ip-10-0-35-184:~/ca ~ + ~
ubuntu@ip-10-0-35-184:~$ sudo git clone https://github.com/krishnanaidu99/car-prediction.git
Cloning into 'car-prediction'...
remote: Enumerating objects: 10841, done.
remote: Counting objects: 1000 (26/26), done.
remote: Compressing objects: 100% (12/12), done.
remote: Total 10841 (delta 10), reused 20 (delta 8), pack-reused 10815
Receiving objects: 100% (10841/10841), 80.95 MB | 24.22 MiB/s, done.
Resolving deltas: 100% (864/864), done.
Updating files: 100% (10350/10350), done.
ubuntu@ip-10-0-35-184:~$ cd car-prediction/
ubuntu@ip-10-0-35-184:~/car-prediction$ ls
OneHotee.joblib  Untitled.ipynb  'car data.csv'          cost            model.pkl      templates
Procfile        app.py       'car prediction deployment link.txt' gitattributes requirements.txt
ubuntu@ip-10-0-35-184:~/car-prediction$ vi app.py
ubuntu@ip-10-0-35-184:~/car-prediction$ sudo apt upgrade
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
ubuntu@ip-10-0-35-184:~/car-prediction$ pip3 install -r requirements.txt
Requirement already satisfied: click==8.1.3 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 1)) (8.1.3)
Requirement already satisfied: colorama==0.4.5 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 2)) (0.4.5)
Requirement already satisfied: Flask==2.2.2 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 3)) (2.2.2)
Requirement already satisfied: itsdangerous==2.1.2 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 4)) (2.1.2)
Requirement already satisfied: Jinja2==3.1.2 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 5)) (3.1.2)
Requirement already satisfied: joblib==1.0 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 6)) (1.1.0)
Requirement already satisfied: MarkupSafe==2.1.1 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 7)) (2.1.1)
Collecting numpy==1.23.3
  Downloading numpy-1.23.3-cp310-cp310-manylinux_2_17_x86_64_manylinux2014_x86_64.whl (17.1 MB)
    17.1/17.1 MB 28.3 MB/s eta 0:00:00
Requirement already satisfied: pandas==1.4.4 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 9)) (1.4.4)
Requirement already satisfied: python-dateutil==2.8.2 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 10)) (2.8.2)
Requirement already satisfied: pytz==2022.2.2.1 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 11)) (2022.2.1)
Requirement already satisfied: scikit-learn==1.1.2 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 12)) (1.1.2)
Requirement already satisfied: scipy==1.9.1 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 13)) (1.9.1)
Requirement already satisfied: six==1.16.0 in /usr/lib/python3/dist-packages (from -r requirements.txt (line 14)) (1.16.0)
Requirement already satisfied: sklearn==0.0 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 15)) (0.0)
Requirement already satisfied: threadpoolctl==3.1.0 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 16)) (3.1.0)
Requirement already satisfied: Werkzeug==2.2.2 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 17)) (2.2.2)
```

```

ubuntu@ip-10-0-35-184:~/ca > + 
Requirement already satisfied: joblib==1.1.0 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 6)) (1.1.0)
Requirement already satisfied: MarkupSafe==2.1.1 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 7)) (2.1.1)
Collecting numpy==1.23.3
  Downloading numpy-1.23.3-cp310-cp310-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (17.1 MB)
    17.1/17.1 MB 28.3 MB/s eta 0:00:00
Requirement already satisfied: pandas==1.4.4 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 9)) (1.4.4)
Requirement already satisfied: python-dateutil==2.8.2 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 10)) (2.8.2)
Requirement already satisfied: pytz==2022.2.1 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 11)) (2022.2.1)
Requirement already satisfied: scikit-learn==1.1.2 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 12)) (1.1.2)
Requirement already satisfied: scipy==1.9.1 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 13)) (1.9.1)
Requirement already satisfied: six==1.16.0 in /usr/lib/python3/dist-packages (from -r requirements.txt (line 14)) (1.16.0)
Requirement already satisfied: sklearn==0.0 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 15)) (0.0)
Requirement already satisfied: threadpoolctl==3.1.0 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 16)) (3.1.0)
Requirement already satisfied: Werkzeug==2.2.2 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 17)) (2.2.2)
Requirement already satisfied: gunicorn==20.0.4 in /home/ubuntu/.local/lib/python3.10/site-packages (from -r requirements.txt (line 18)) (20.0.4)
Requirement already satisfied: setuptools<=3.0 in /usr/lib/python3/dist-packages (from gunicorn==20.0.4->-r requirements.txt (line 19)) (59.6.0)
Installing collected packages: numpy
  Attempting uninstall: numpy
    Found existing installation: numpy 1.23.2
      Uninstalling numpy-1.23.2:
        Successfully uninstalled numpy-1.23.2
WARNING: The scripts F2py, F2py3 and f2py3.10 are installed in '/home/ubuntu/.local/bin' which is not on PATH.
Consider adding this directory to PATH or, if you prefer to suppress this warning, use --no-warn-script-location.
Successfully installed numpy-1.23.3
ubuntu@ip-10-0-35-184:~/car-prediction$ python3 app.py
* Serving Flask app 'app'
* Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on all addresses (0.0.0.0)
* Running on http://127.0.0.1:7000
* Running on http://10.0.35.184:7000
Press CTRL+C to quit
* Restarting with stat
* Debugger is active!
* Debugger PIN: 260-531-486
120.88.40.181 - - [08/Jul/2023 13:17:41] "GET / HTTP/1.1" 200 -
*Ubuntu@ip-10-0-35-184:~/car-prediction$ ubuntu@ip-10-0-35-184:~/car-prediction$ screen -m -d python3 app.py
ubuntu@ip-10-0-35-184:~/car-prediction$ 

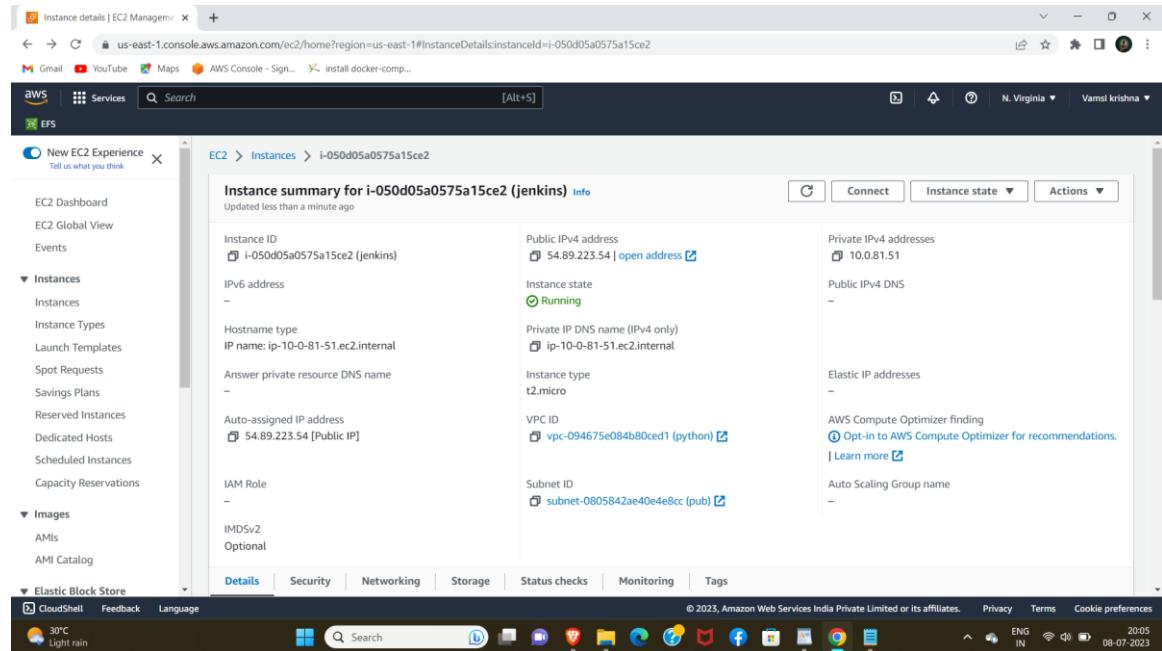
```



**DEPLOY THE GITHUB REPO IN
JENKINS**

STEP - 1

1. create instance assain port 8080 & connect to terminal

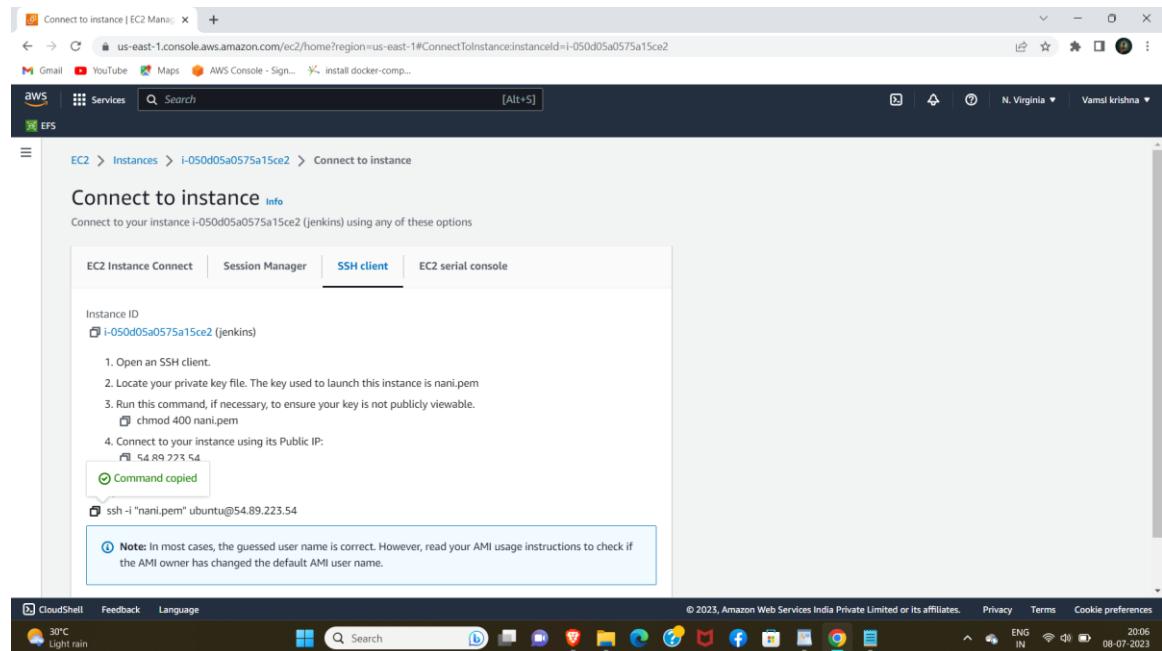


Instance summary for i-050d05a0575a15ce2 (jenkins) [Info](#)

Updated less than a minute ago

Instance ID	Public IPv4 address	Private IPv4 addresses
i-050d05a0575a15ce2 (jenkins)	54.89.223.54 open address	10.0.81.51
IPv6 address	—	Public IPv4 DNS
Hostname type	Private IP DNS name (IPv4 only)	—
IP name: ip-10-0-81-51.ec2.internal	ip-10-0-81-51.ec2.internal	Elastic IP addresses
Answer private resource DNS name	—	—
Instance type	t2.micro	AWS Compute Optimizer finding
Auto-assigned IP address	VPC ID	Opt-in to AWS Compute Optimizer for recommendations.
54.89.223.54 [Public IP]	vpc-094675e084b80ced1 (python)	Learn more
IAM Role	Subnet ID	Auto Scaling Group name
—	subnet-0805842ae40e4e8cc (pub)	—
IMDSv2	—	—
Optional	—	—

[Details](#) [Security](#) [Networking](#) [Storage](#) [Status checks](#) [Monitoring](#) [Tags](#)



Connect to instance [Info](#)

Connect to your instance i-050d05a0575a15ce2 (jenkins) using any of these options

EC2 Instance Connect [Session Manager](#) [SSH client](#) [EC2 serial console](#)

Instance ID
i-050d05a0575a15ce2 (jenkins)

1. Open an SSH client.
2. Locate your private key file. The key used to launch this instance is nani.pem
3. Run this command, if necessary, to ensure your key is not publicly viewable.
chmod 400 nani.pem
4. Connect to your instance using its Public IP:
54.89.223.54

Command copied

ssh -i "nani.pem" ubuntu@54.89.223.54

Note: In most cases, the guessed user name is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI user name.

CloudShell Feedback Language © 2023, Amazon Web Services India Private Limited or its affiliates. Privacy Terms Cookie preferences 30°C Light rain ENG IN 20:06 08-07-2023

2 install java & jenkins

```
ubuntu@ip-10-0-81-51:/etc ~ + ~
Reading state information... Done
E: Unable to locate package java-11-openjdk
ubuntu@ip-10-0-81-51:~$ sudo apt install openjdk-11-jdk -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
alsa-topology-conf alsua-ucm-conf at-sp1-core ca-certificates-java dconf-gsettings-backend dconf-service fontconfig-config fonts-dejavu-core
fonts-dejavu-extras gsettings-desktop-schemas java-common libasound2 libasound2-data libatk-bridge2.0-0 libatk-wrapperv2.0-0 libatk-wrapperv2.0-0 libatk-wrapperv2.0-0 libavahi-client3 libavahi-common-data libavahi-common3 libcups1 libdconf1 libdrm-amdgpu libdrm-intel1
libdrm-nouveau2 libdrm-radeon1 libfontconfig1 libfontenc1 libgff1 libgl1 libgl1-amber-dri libgl1-mesa-dri libglapi-mesa libglvnd0 libglx-mesa0 libglx0
libgraphite2-2 libharfbuzz2b libice-dev libice6 libjpeg-turbo libjpeg8 liblcms2-2 liblwm15 libpciaccess8 libpcslite1 libpthread-stubs0-dev
libsensors-config libsensors5 libsm-dev libsm6 libx11-dev libx11-xcb1 libxau-dev libxaw7 libxcb-dri2-0 libxcb-dri3-0 libxcb-glx0 libxcb-present0
libxcb-shape0 libxcb-shm0 libxcb-sync1 libxcb-xfixes0 libxcb1-dev libxcomposite1 libxdmcp-dev libxfixes3 libxf2 libxi6 libxinerama1 libxbfile1 libxmu6
libxp4 libxrandr2 libxrender1 libxshmfence1 libxt-dev libxt6 libxv1 libxxf86dgal libxxf86m1 openjdk-11-jdk-headless openjdk-11-jre
openjdk-11-jre-headless session-migration x11-common x11-utils x11proto-dev xorg-sgml-doctools xtrans-dev
Suggested packages:
default-jre libasound2-plugins alsu-utils cups-common libice-doc liblcm2-utils pccsl lm-sensors libsm-doc libx11-doc libxcb-doc libxt-doc
openjdk-11-demo openjdk-11-source visualvm libnss-mdns fonts-ipafont-gothic fonts-ipafont-mincho fonts-wqy-microhei | fonts-wqy-zenhei fonts-indic
mesa-utils
The following NEW packages will be installed:
alsa-topology-conf alsua-ucm-conf at-sp1-core ca-certificates-java dconf-gsettings-backend dconf-service fontconfig-config fonts-dejavu-core
fonts-dejavu-extras gsettings-desktop-schemas java-common libasound2 libasound2-data libatk-bridge2.0-0 libatk-wrapperv2.0-0 libatk-wrapperv2.0-0 libatk-wrapperv2.0-0 libavahi-client3 libavahi-common-data libavahi-common3 libcups1 libdconf1 libdrm-amdgpu libdrm-intel1
libdrm-nouveau2 libdrm-radeon1 libfontconfig1 libfontenc1 libgff1 libgl1 libgl1-amber-dri libgl1-mesa-dri libglapi-mesa libglvnd0 libglx-mesa0 libglx0
libgraphite2-2 libharfbuzz2b libice-dev libice6 libjpeg-turbo8 libjpeg8 liblcm2-2 liblwm15 libpciaccess8 libpcslite1 libpthread-stubs0-dev
libsensors-config libsensors5 libsm-dev libsm6 libx11-dev libx11-xcb1 libxau-dev libxaw7 libxcb-dri2-0 libxcb-dri3-0 libxcb-glx0 libxcb-present0
libxcb-shape0 libxcb-shm0 libxcb-xfixes0 libxcb1-dev libxcomposite1 libxdmcp-dev libxfixes3 libxf2 libxi6 libxinerama1 libxbfile1 libxmu6
libxp4 libxrandr2 libxrender1 libxshmfence1 libxt-dev libxt6 libxv1 libxxf86dgal libxxf86m1 openjdk-11-jdk openjdk-11-jre-headless
openjdk-11-jre openjdk-11-jre-headless session-migration x11-common x11-utils x11proto-dev xorg-sgml-doctools xtrans-dev
0 upgraded, 94 newly installed, 0 to remove and 0 not upgraded.
Need to get 164 MB of archives.
After this operation, 99.3 MB of additional disk space will be used.
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 alsu-topology-conf all 1.2.5.1-2 [15.5 kB]
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 libasound2-data all 1.2.6.1-1ubuntu1 [19.1 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 libasound2 amd64 1.2.6.1-1ubuntu1 [390 kB]
Get:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 alsua-ucm-conf all 1.2.6.3-1ubuntu1.6 [41.8 kB]
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 libx16 amd64 2:1.8-1build1 [32.6 kB]
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 libatspi2.0-0 amd64 2.44.0-3 [88.9 kB]
Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 x11-common all 1:7.7+23ubuntu2 [23.4 kB]
ubuntu@ip-10-0-81-51:~
```

```
ubuntu@ip-10-0-81-51:/etc ~ + ~
Get:7 https://pkg.jenkins.io/debian-stable binary/ Release.gpg [833 B]
Get:8 https://pkg.jenkins.io/debian-stable binary/ Packages [25.1 kB]
Fetched 28.0 kB in 1s (35.9 kB/s)
Reading package lists... Done
ubuntu@ip-10-0-81-51:~$ sudo apt-get install jenkins
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
net-tools
The following NEW packages will be installed:
jenkins net-tools
0 upgraded, 2 newly installed, 0 to remove and 0 not upgraded.
Need to get 95.8 MB of archives.
After this operation, 99.3 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 net-tools amd64 1.60+git20181103.0eebece-1ubuntu5 [204 kB]
Get:2 https://pkg.jenkins.io/debian-stable binary/ jenkins Jenkins 2.401.2 [95.6 MB]
Fetched 95.8 MB in 6s (16.2 MB/s)
Selecting previously unselected package net-tools.
(Reading database ... 96075 files and directories currently installed.)
Preparing to unpack .../net-tools_1.60+git20181103.0eebece-1ubuntu5_amd64.deb ...
Unpacking net-tools (1.60+git20181103.0eebece-1ubuntu5) ...
Selecting previously unselected package jenkins.
Preparing to unpack .../jenkins_2.401.2_all.deb ...
Unpacking jenkins (2.401.2) ...
Setting up net-tools (1.60+git20181103.0eebece-1ubuntu5) ...
Setting up jenkins (2.401.2) ...
Created symlink /etc/systemd/system/multi-user.target.wants/jenkins.service → /lib/systemd/system/jenkins.service.
Processing triggers for man-db (2.10.2-1) ...
Scanning processes...
Scanning candidates...
Scanning linux images...

Restarting services...
Service restarts being deferred:
/etc/needrestart/restart.d/dbus.service
systemctl restart networkd-dispatcher.service
systemctl restart unattended-upgrades.service
ubuntu@ip-10-0-81-51:~
```

3.start & enable &check status for jenkins

```

ubuntu@ip-10-0-81-51:/etc ~ + 
No containers need to be restarted.
No user sessions are running outdated binaries.

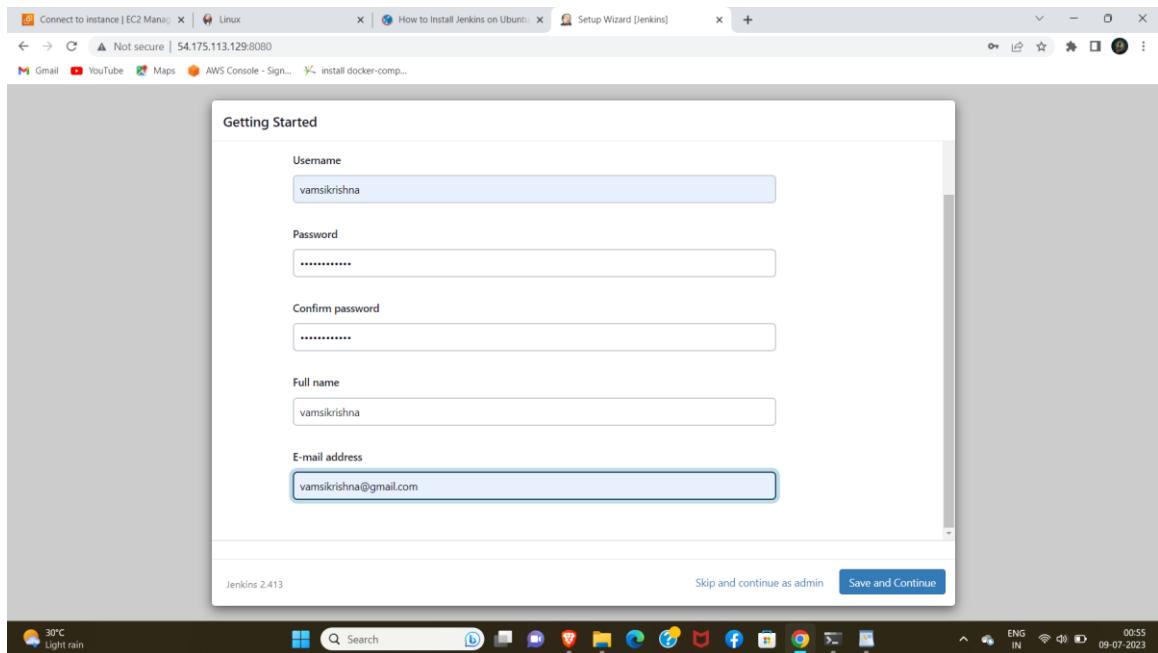
No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-10-0-81-51:~$ sudo systemctl enable jenkins
Synchronizing state of jenkins.service with SysV service script with /lib/systemd/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install enable jenkins
ubuntu@ip-10-0-81-51:~$ sudo systemctl start jenkins
ubuntu@ip-10-0-81-51:~$ sudo systemctl status jenkins
● jenkins.service - Jenkins Continuous Integration Server
   Loaded: loaded (/lib/systemd/system/jenkins.service; enabled; vendor preset: enabled)
     Active: active (running) since Sat 2023-07-08 14:52:20 UTC; 58s ago
       Main PID: 25294 (java)
          Tasks: 42 (limit: 1141)
            Memory: 383.9M
              CPU: 44.518s
            CGroup: /system.slice/jenkins.service
                    └─25294 /usr/bin/java -Djava.awt.headless=true -jar /usr/share/java/jenkins.war --webroot=/var/cache/jenkins/war --httpPort=8080

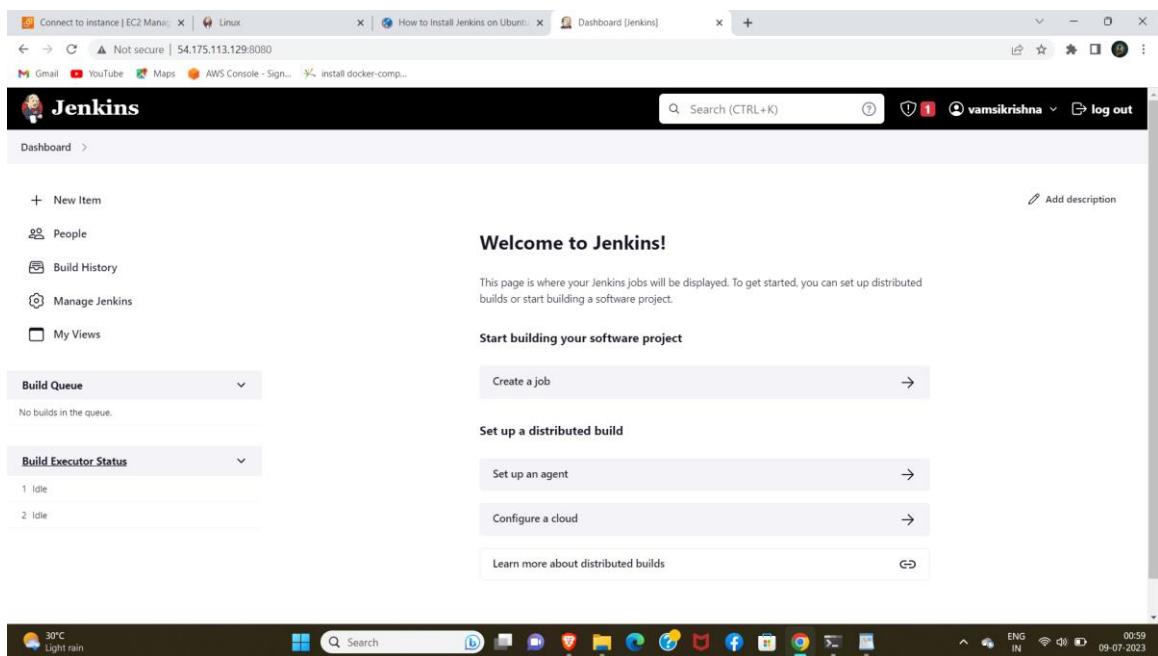
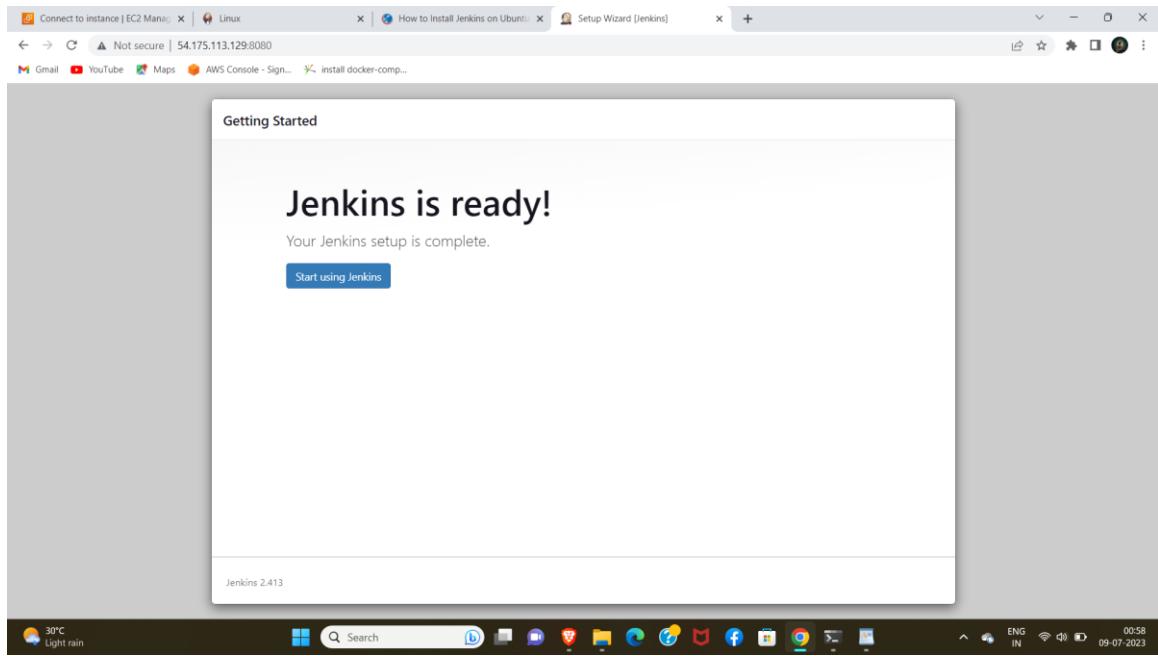
Jul 08 14:51:45 ip-10-0-81-51 jenkins[25294]: 5014ebdf7a39405ab32c699361fcfad4
Jul 08 14:51:45 ip-10-0-81-51 jenkins[25294]: This may also be found at: /var/lib/jenkins/secrets/initialAdminPassword
Jul 08 14:51:45 ip-10-0-81-51 jenkins[25294]: ****
Jul 08 14:51:45 ip-10-0-81-51 jenkins[25294]: ****
Jul 08 14:52:20 ip-10-0-81-51 jenkins[25294]: 2023-07-08 14:52:20.024+0000 [id=29]      INFO  jenkins.InitReactorRunner$1#onAttained: Completed initial setup
Jul 08 14:52:20 ip-10-0-81-51 jenkins[25294]: 2023-07-08 14:52:20.056+0000 [id=22]      INFO  hudson.Lifecycle#onReady: Jenkins is fully up and running
Jul 08 14:52:20 ip-10-0-81-51 systemd[1]: Started Jenkins Continuous Integration Server.
Jul 08 14:52:20 ip-10-0-81-51 jenkins[25294]: 2023-07-08 14:52:20.154+0000 [id=44]      INFO  h.m.DownloadService#Downloadable#load: Obtained the update center configuration
Jul 08 14:52:20 ip-10-0-81-51 jenkins[25294]: 2023-07-08 14:52:20.155+0000 [id=44]      INFO  hudson.util.RetriggerStart: Performed the action check
[lines 1-28/28 (END)]

ubuntu@ip-10-0-81-51:~$ sudo cat /var/lib/jenkins/secrets/initialAdminPassword
5014ebdf7a39405ab32c699361fcfad4
ubuntu@ip-10-0-81-51:~$ sudo /etc
sudo: /etc: command not found
ubuntu@ip-10-0-81-51:~$ cd /etc
ubuntu@ip-10-0-81-51:~/etc$ sudo/sudoers
-bash: sudo/sudoers: No such file or directory
ubuntu@ip-10-0-81-51:~/etc$ sudo vi sudo/sudoers

```

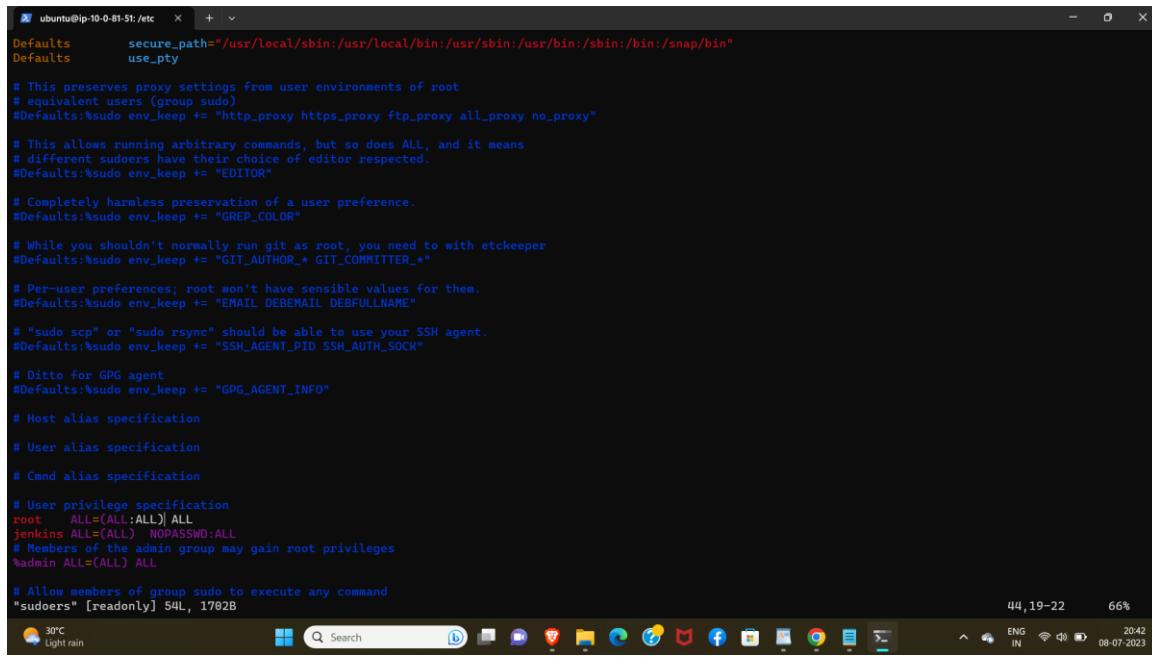
4browse ip& cat phaste path and give password and install jenkins page





5. jenkins passwd permissions in terminal to give [cd /etc]

open [vi sudoers] give permissions



```

Defaults        secure_path="/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/snap/bin"
Defaults        use_pty

# This preserves proxy settings from user environments of root
# equivalent users (group sudo)
Defaults:%sudo env_keep += "http_proxy https_proxy ftp_proxy all_proxy no_proxy"

# This allows running arbitrary commands, but so does ALL, and it means
# different sudoers have their choice of editor respected.
Defaults:%sudo env_keep += "EDITOR"

# Completely harmless preservation of a user preference.
Defaults:%sudo env_keep += "GREP_COLOR"

# While you shouldn't normally run git as root, you need to with etckeeper
Defaults:%sudo env_keep += "GIT_AUTHOR_* GIT_COMMITTER_"

# Per-user preferences; root won't have sensible values for them.
Defaults:%sudo env_keep += "EMAIL DEBEMAIL DEBFULLNAME"

# "sudo scp" or "sudo rsync" should be able to use your SSH agent.
Defaults:%sudo env_keep += "SSH_AGENT_PID SSH_AUTH_SOCK"

# Ditto for GPG agent
Defaults:%sudo env_keep += "GPG_AGENT_INFO"

# Host alias specification

# User alias specification

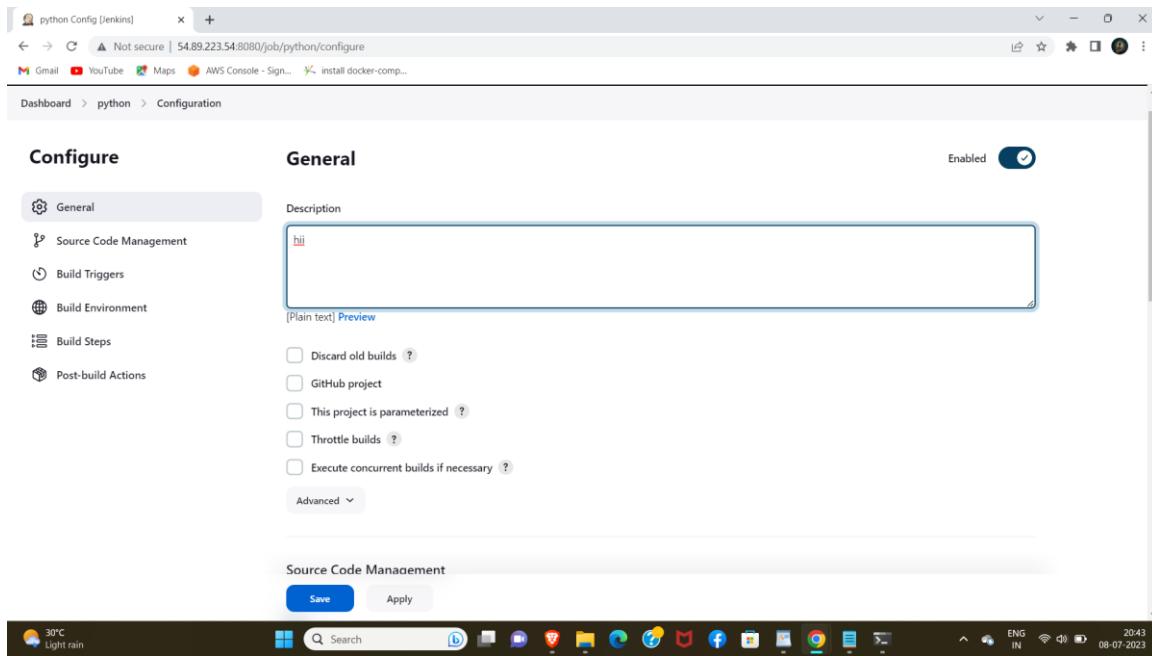
# Cmd alias specification

# User privilege specification
root    ALL=(ALL:ALL)ALL
jenkins ALL=(ALL) NOPASSWD:ALL
# Members of the admin group may gain root privileges
%admin  ALL=(ALL) ALL

# Allow members of group sudo to execute any command
"sudoers" [readonly] 54L, 1702B

```

6.create a new job in jenkins



Configure

General

Description

Enabled

hii

[Plain text] Preview

Discard old builds ?
 GitHub project
 This project is parameterized ?
 Throttle builds ?
 Execute concurrent builds if necessary ?

Advanced ▾

Source Code Management

Save Apply

7. add repo and credentials and give commands in execute shell

The screenshot shows two consecutive screenshots of the Jenkins configuration interface for a job named "Flight Price Prediction".

Source Code Management Configuration:

- Repositories:** A repository URL is set to `https://github.com/krishnanaidu99/flight-perdiction.git`, and a credential named `krishnanaidu99/******** (1234)` is selected.
- Branches to build:** The branch specifier is set to `*/master`.
- Buttons:** Save and Apply.

Build Steps Configuration:

- Execute shell:** The command entered is:

```
#!/bin/bash
sudo apt update
sudo apt upgrade
sudo apt full-upgrade
sudo apt-get install python3-pip -y
sudo git clone https://github.com/krishnanaidu99/flight-perdiction.git
cd flight-perdiction/
pip install -r requirements.txt
python3 app.py
screen -m -d python3 app.py
```
- Buttons:** Advanced, Add build step, Save, and Apply.

8now save and build now & browse public ip and see output

Instances | EC2 Management Con... | Linux | python #3 Console [Jenkins] | Flight Price Prediction | +

Not secure | 44.202.4.220:8080/job/python/3/console

Gmail YouTube Maps AWS Console - Sign... install docker-comp...

Dashboard > python > #3 > Console Output

Console Output

Started by user vamsikrishna
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/python
The recommended git tool is: NONE
No credentials specified
Cloning the remote Git repository
Cloning repository https://github.com/krishnanaidu99/flight-perdiction.git
> git init /var/lib/jenkins/workspace/python # timeout=10
Fetching upstream changes from https://github.com/krishnanaidu99/flight-perdiction.git
> git --version # timeout=10
> git fetch -t --tags --force -- https://github.com/krishnanaidu99/flight-perdiction.git +refs/heads/*:refs/remotes/origin/* # timeout=10
> git config core.sparsecheckout # timeout=10
> git checkout -f fd924a30ebd301897abe9d4226e20adface7fdaf # timeout=10
Commit message: "Update app.py"
First time build. Skipping changelog.
[python] \$ /bin/bash /tmp/jenkins1577268810244778672.sh

WARNING: apt does not have a stable CLI interface. Use with caution in scripts.

Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Hit:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease
Ign:4 https://pkg.jenkins.io/debian-stable binary/ InRelease

28°C Partly sunny

Search

ENG IN 11:34 09-07-2023

Instances | EC2 Management Con... | Linux | python #3 Console [Jenkins] | Flight Price Prediction | +

Not secure | 44.202.4.220:8080/job/python/3/console

Gmail YouTube Maps AWS Console - Sign... install docker-comp...

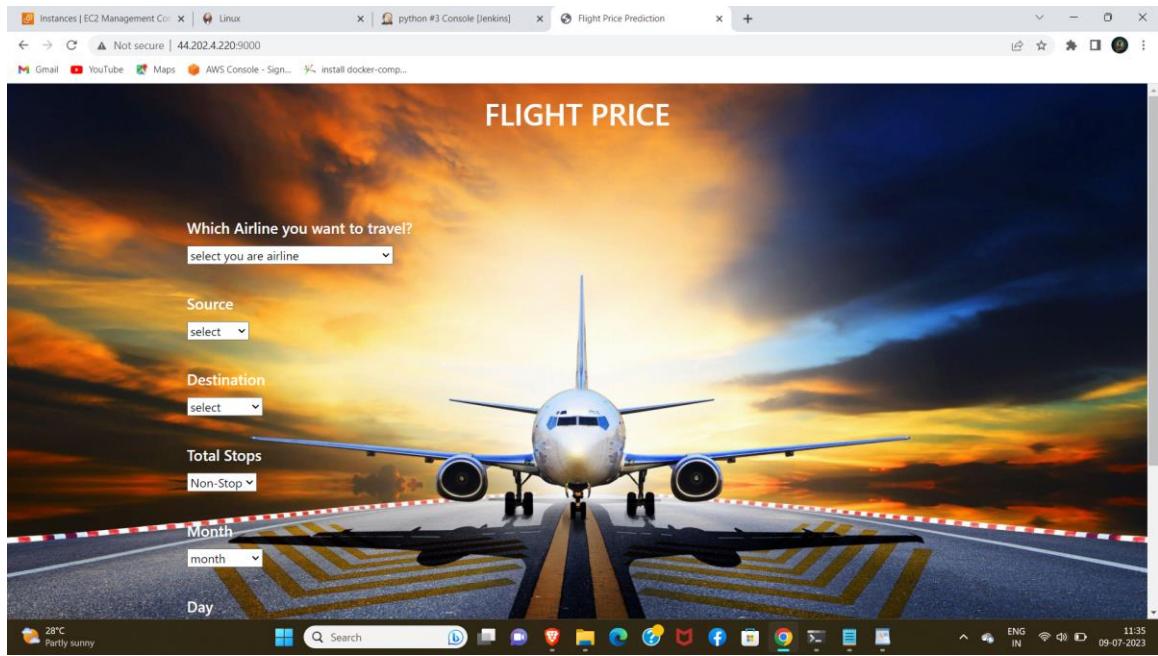
Dashboard > python > #3 > Console Output

Successfully built sklearn
Installing collected packages: ptyz, zipp, threadpoolctl, python-dateutil, numpy, MarkupSafe, joblib, itsdangerous, gunicorn, colorama, click, Werkzeug, scipy, pandas, Jinja2, importlib-metadata, scikit-learn, Flask, sklearn
WARNING: The scripts f2py, f2py3 and f2py3.10 are installed in '/var/lib/jenkins/.local/bin' which is not on PATH.
Consider adding this directory to PATH or, if you prefer to suppress this warning, use --no-warn-script-location.
WARNING: The script gunicorn is installed in '/var/lib/jenkins/.local/bin' which is not on PATH.
Consider adding this directory to PATH or, if you prefer to suppress this warning, use --no-warn-script-location.
WARNING: The script flask is installed in '/var/lib/jenkins/.local/bin' which is not on PATH.
Consider adding this directory to PATH or, if you prefer to suppress this warning, use --no-warn-script-location.
Successfully installed Flask-2.2.2 Jinja2-3.1.2 MarkupSafe-2.1.1 Werkzeug-2.2.2 click-8.1.3 colorama-0.4.5 gunicorn-20.0.4 importlib-metadata-4.12.0 itsdangerous-2.1.2 joblib-1.1.0 numpy-1.23.2 pandas-1.4.4 python-dateutil-2.8.2 pytz-2022.2.1 scikit-learn-1.1.2 scipy-1.9.1 sklearn-0.0
threadpoolctl-3.1.0 zipp-3.8.1
* Serving Flask app 'app'
* Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on all addresses (0.0.0.0)
* Running on http://127.0.0.1:9000
* Running on http://10.0.8.245:9000
Press CTRL+C to quit
* Restarting with stat
* Debugger is active!
* Debugger PIN: 875-857-186
120.88.40.180 - - [09/Jul/2023 05:58:53] "GET / HTTP/1.1" 200 -
120.88.40.180 - - [09/Jul/2023 05:58:54] "GET /static/css/styles.css HTTP/1.1" 404 -
120.88.40.180 - - [09/Jul/2023 05:58:55] "GET /favicon.ico HTTP/1.1" 404 -

28°C Partly sunny

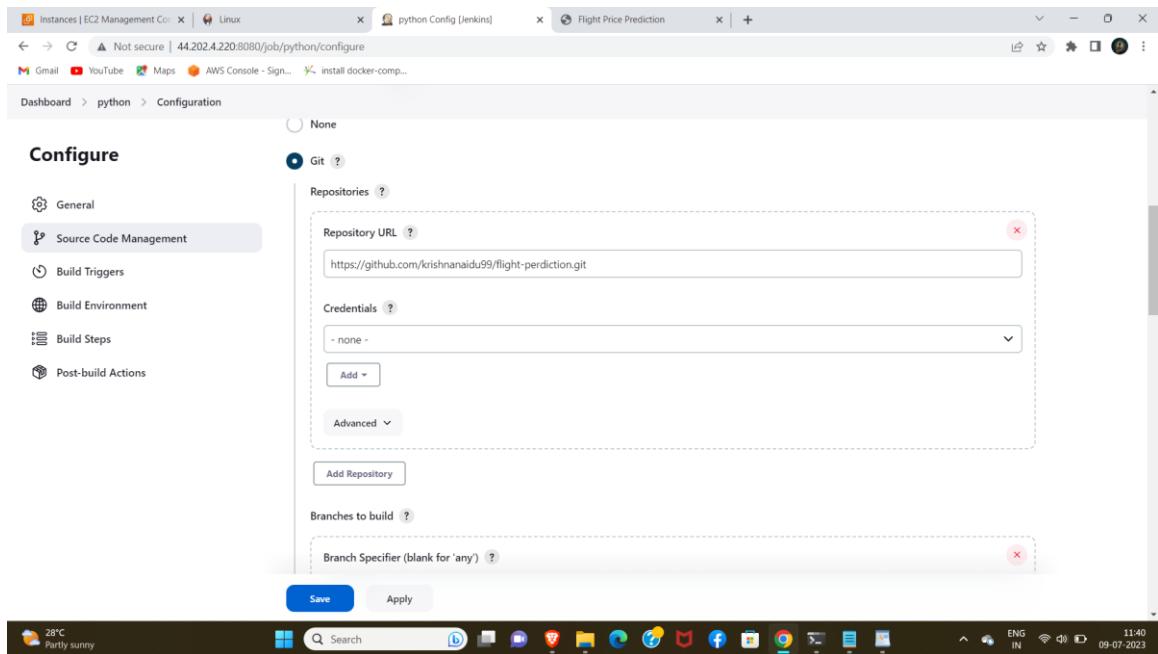
Search

ENG IN 11:34 09-07-2023



DEPLOY GITHUB FLIGHT REPO IN WEBHOOK

1. add repo & give permissions and give commands in excite shell



The screenshot shows the Jenkins configuration page for a job named "python Config". The "Build Triggers" section is active, displaying several trigger options. The "GitHub hook trigger for GITScm polling" option is checked, while others like "Trigger builds remotely", "Build after other projects are built", and "Build periodically" are unchecked. Below this, the "Build Environment" section includes a checkbox for "Delete workspace before build starts" which is checked. There is also an "Advanced" dropdown menu with several additional options: "Use secret text(s) or file(s)", "Add timestamps to the Console Output", "Inspect build log for published build scans", "Terminate a build if it's stuck", and "With Ant". At the bottom of the configuration panel are "Save" and "Apply" buttons.

This screenshot shows the Jenkins configuration page for the same job, but the "Build Steps" section is now active. A single "Execute shell" step has been added, containing the following command:

```
#!/bin/bash
sudo apt update
sudo apt upgrade
sudo apt full-upgrade
sudo apt-get install python3-pip -y
sudo git clone https://github.com/krishnanaidu99/flight-perdition.git
cd flight-perdition/
pip install -r requirements.txt
python3 app.py
screen -m -d python3 app.py
```

The "Advanced" dropdown menu is visible below the command box. At the bottom are "Save" and "Apply" buttons.

2.
goto git hub inside the repository click on webhooks and add jenkins

The screenshot shows the GitHub 'Webhooks / Manage webhook' page. On the left, a sidebar lists various GitHub settings categories like Access, Collaborators, and Webhooks. The 'Webhooks' section is selected. The main area contains fields for 'Payload URL' (set to <http://44.202.4.220:8080/github-webhook/>), 'Content type' (set to application/x-www-form-urlencoded), and a 'Secret' field. Below these, there's a section for triggering events: 'Just the push event.' (radio button), 'Send me everything.' (radio button, selected), and 'Let me select individual events.' (radio button). A checked checkbox labeled 'Active' indicates the webhook will deliver event details when triggered. At the bottom are 'Update webhook' and 'Delete webhook' buttons.

This screenshot shows the GitHub repository settings for 'krishnanaidu99/flight-perdiction'. The 'Webhooks' section is visible in the sidebar. In the main area, a list of webhooks is shown, with one entry for the URL <https://44.202.4.220:8080/github-webhook/>. This entry includes an 'Edit' button and a 'Delete' button. The rest of the repository settings page is visible, including sections for Code, Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings.

3. build now to see out put

Build #4 (Jul 9, 2023, 6:19:41 AM)

Started by user **vamsikrishna**

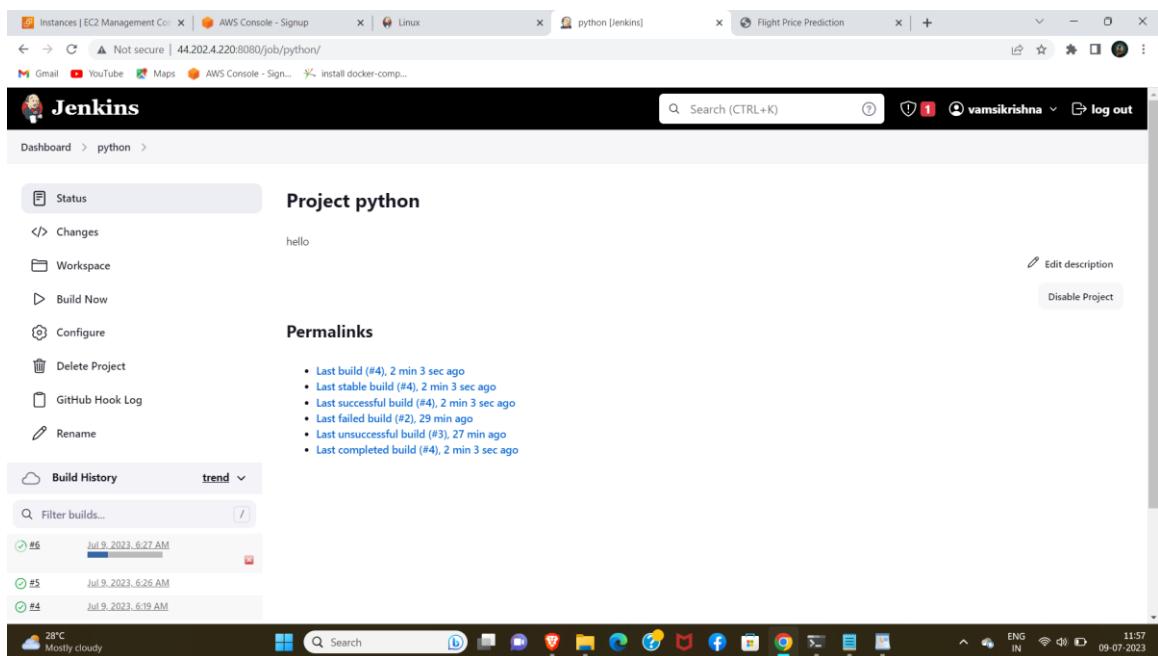
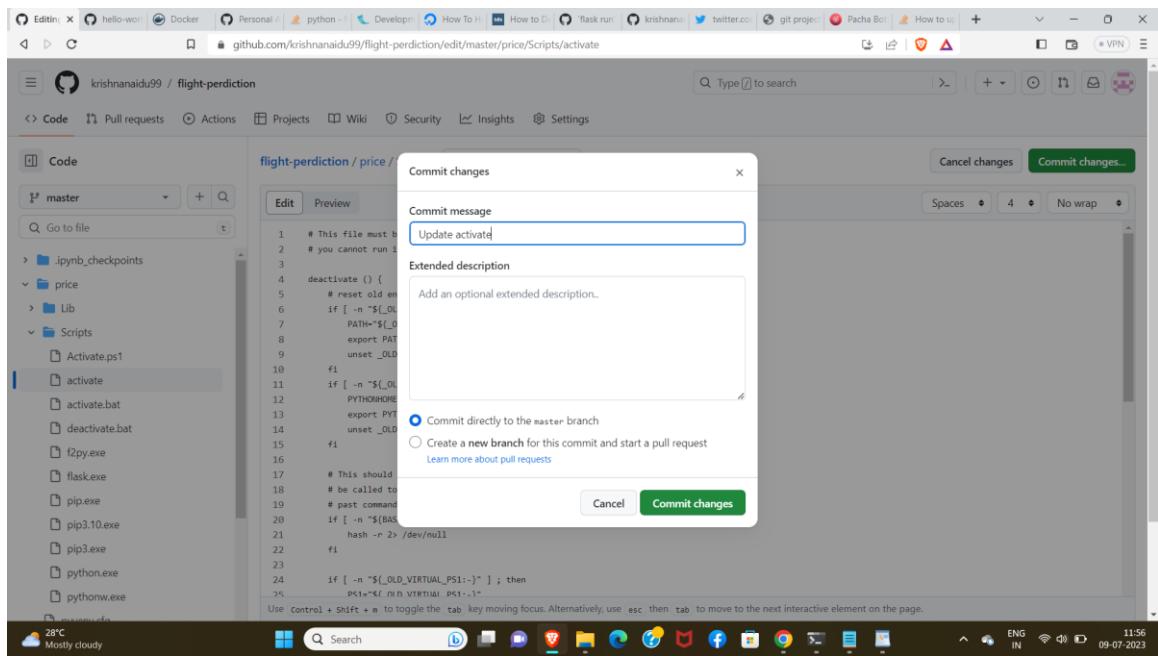
Revision: fd924a30ebd301897abe9d4226e20adface7fdaf
Repository: <https://github.com/krishnanaidu99/flight-perdiction.git>

```

Started by user vamsikrishna
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/python
[WS-CLEANUP] Deleting project workspace...
[WS-CLEANUP] Deferred wipeout is used...
[WS-CLEANUP] Done
The recommended git tool is: NONE
No credentials specified
Cloning the remote Git repository
Cloning repository https://github.com/krishnanaidu99/flight-perdiction.git
> git init /var/lib/jenkins/workspace/python # timeout=10
> git --version # timeout=10
> git -> version # 'git version 2.34.1'
> git fetch -t --tags --force -- https://github.com/krishnanaidu99/flight-perdiction.git +refs/heads/*:refs/remotes/origin/* # timeout=10
> git config remote.origin.url https://github.com/krishnanaidu99/flight-perdiction.git # timeout=10
> git config --add remote.origin.fetch +refs/heads/*:refs/remotes/origin/* # timeout=10
Avoid second fetch
> git rev-parse refs/remotes/origin/master^{commit} # timeout=10
Checking out Revision fd924a30ebd301897abe9d4226e20adface7fdaf (refs/remotes/origin/master)
> git config core.sparsecheckout # timeout=10
> git checkout -f fd924a30ebd301897abe9d4226e20adface7fdaf # timeout=10
Commit message: "Update app.py"
> git rev-list --no-walk fd924a30ebd301897abe9d4226e20adface7fdaf # timeout=10
[python] $ /bin/bash /tmp/jenkins14684100745930632666.sh

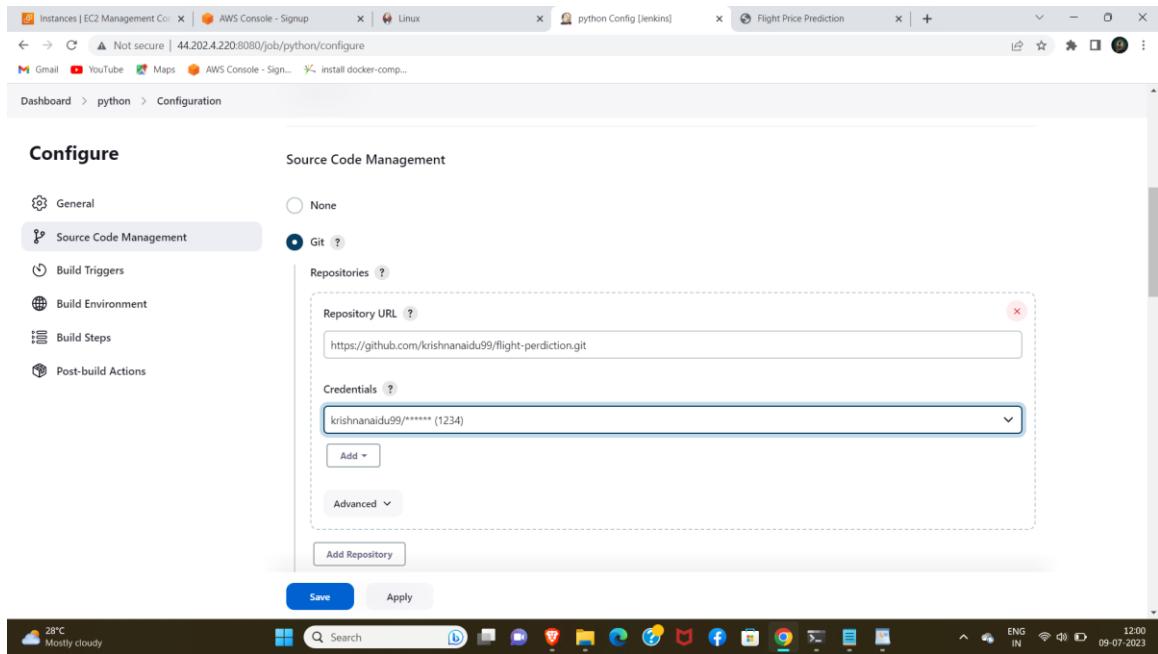
```

4.goto github and change something for code and go to jenkins to see automatically build the code

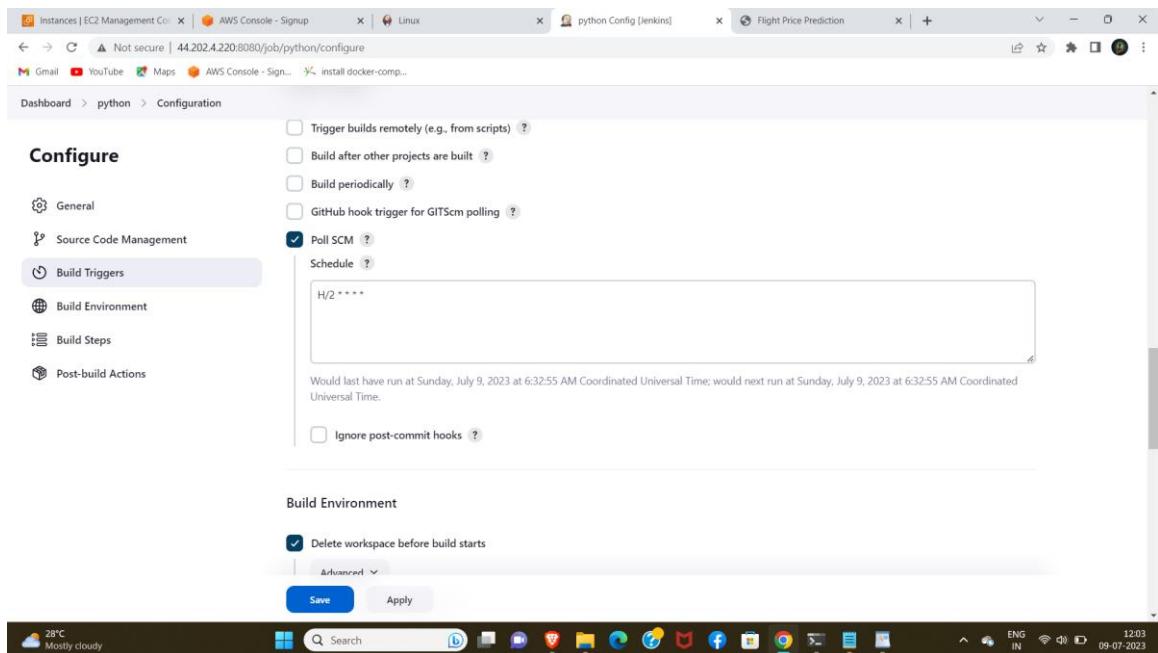


DEPLOY GITHUB FLIGHT REPO IN POLLSCM

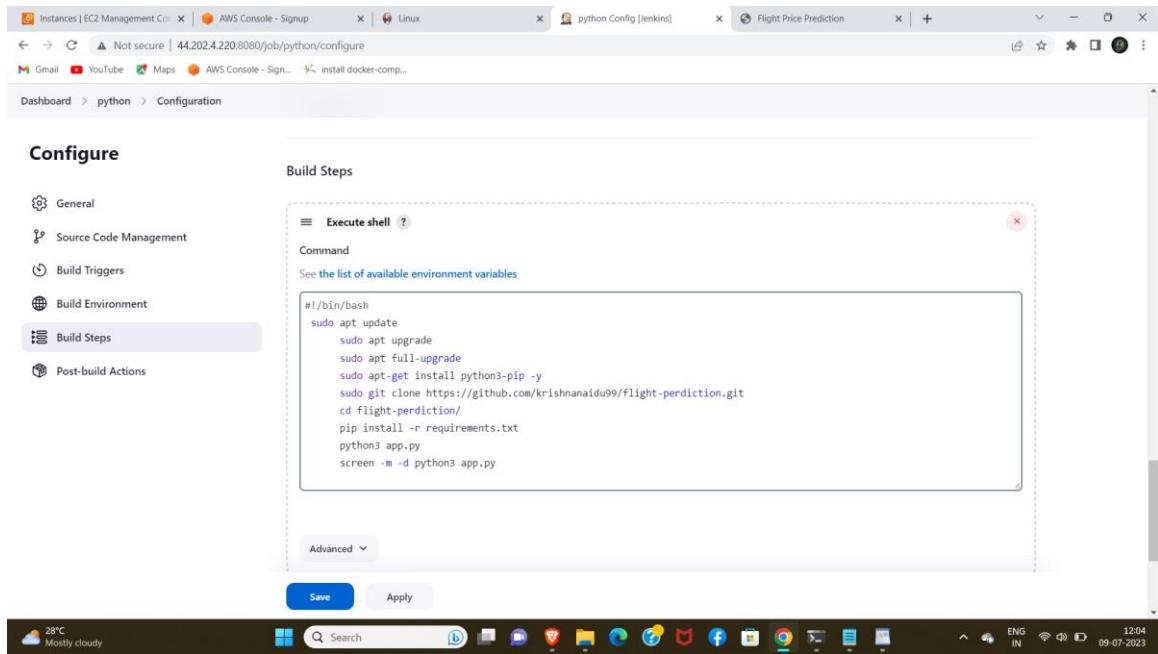
1. add git repo and craditionals in jenkins



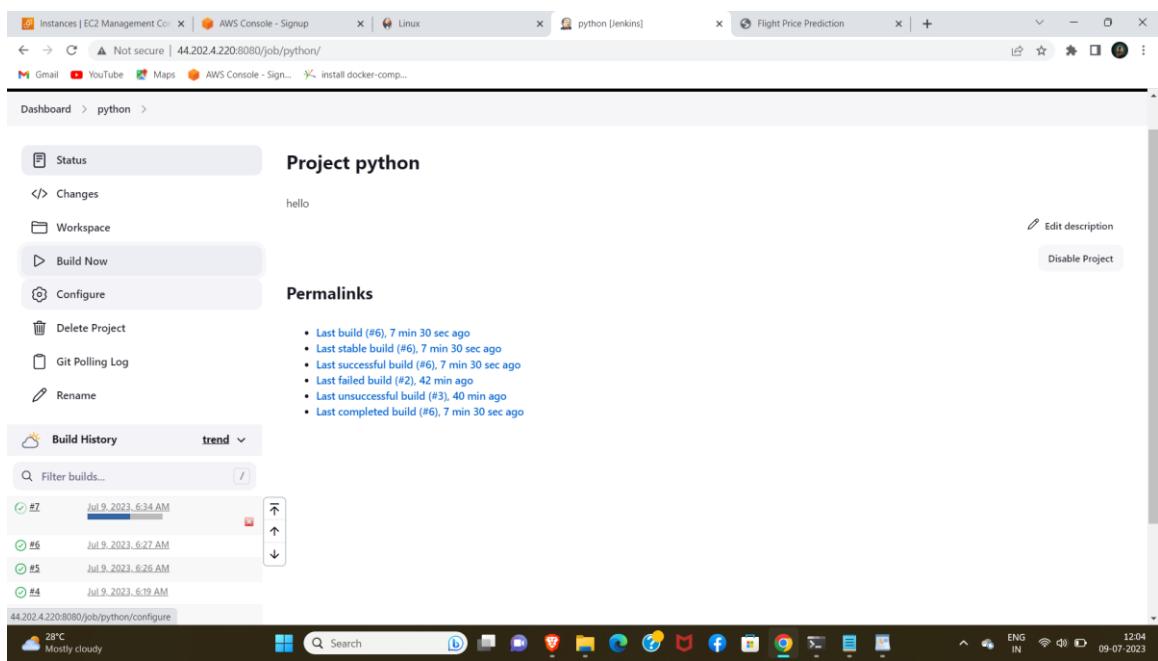
2. click on poll scm and set a time like [H/2 * * * *]



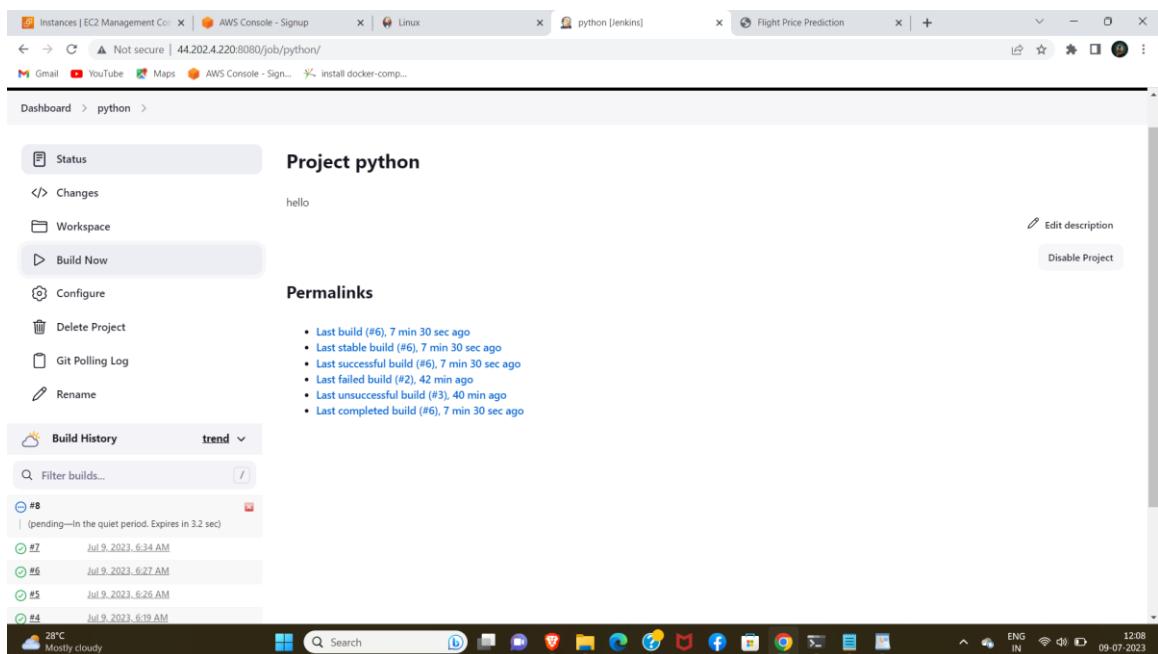
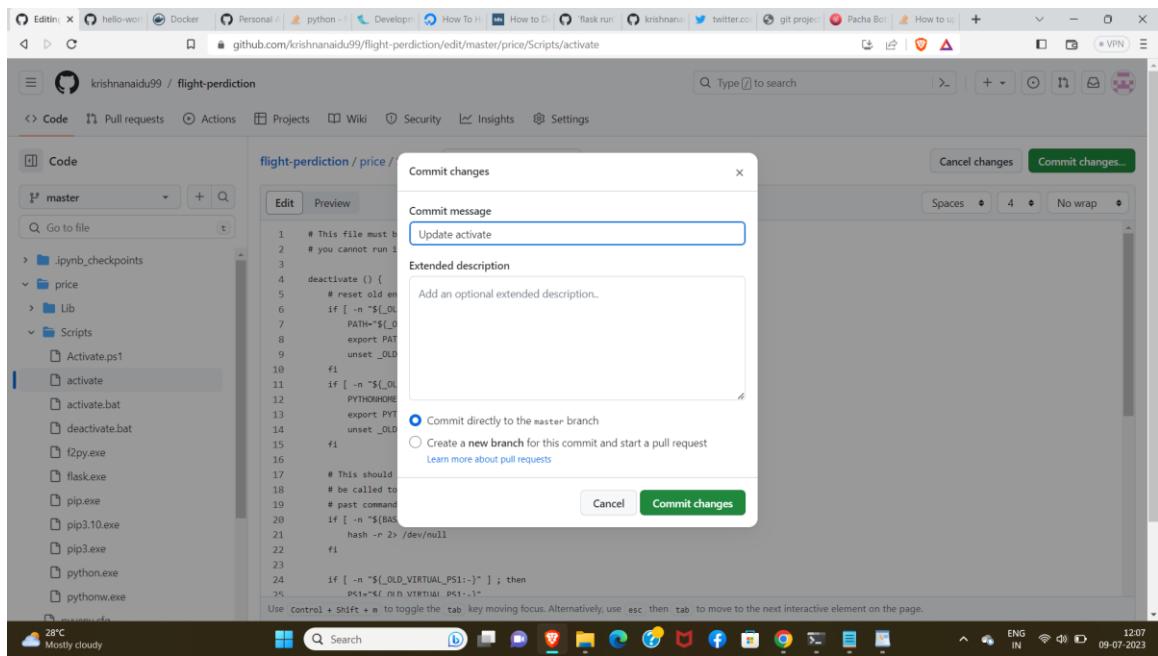
3. add commands in execute shell



4. save and build now



5. goto github and give any changes for code and and then build automatically after gived time in pollscm



to see automatically triggered

DEPLOY GITHUB FLIGHT REPO IN USERDATA IN EC2 INSTANCE

1. create instance using ubuntu and select vpc and subnet & keypair create security group rule in flight code related .

Screenshot of the AWS Management Console showing the EC2 Management Console interface. The user is launching a new instance.

Name: vamsi

Application and OS Images (Amazon Machine Image):

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below.

Software Image (AMI): Canonical, Ubuntu, 22.04 LTS, ...read more
ami-053b0d53c279acc90

Virtual server type (instance type): t2.micro

Firewall (security group): New security group

Storage (volumes): 1 volume(s) - 8 GiB

Launch instance

CloudShell Feedback Language 28°C Mostly cloudy © 2023, Amazon Web Services India Private Limited or its affiliates. Privacy Terms Cookie preferences ENG IN 09-07-2023 12:18

Screenshot of the AWS Management Console showing the EC2 Management Console interface. The user is launching a new instance.

Instance type:

t2.micro
Family: t2 1 vCPU 1 GiB Memory Current generation: true
On-Demand Windows pricing: 0.0162 USD per Hour
On-Demand SUSE pricing: 0.0116 USD per Hour
On-Demand RHEL pricing: 0.0716 USD per Hour
On-Demand Linux pricing: 0.0116 USD per Hour

All generations

Compare instance types

Key pair (login):

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - required
nani

Network settings:

Network Info
vpc-040d3692be8897c57

Summary:

Number of instances Info
1

Software Image (AMI): Canonical, Ubuntu, 22.04 LTS, ...read more
ami-053b0d53c279acc90

Virtual server type (instance type): t2.micro

Firewall (security group): New security group

Storage (volumes): 1 volume(s) - 8 GiB

Launch instance

CloudShell Feedback Language 28°C Mostly cloudy © 2023, Amazon Web Services India Private Limited or its affiliates. Privacy Terms Cookie preferences ENG IN 09-07-2023 12:18

The screenshot shows the AWS Management Console interface for launching an EC2 instance. The left pane displays 'Network settings' with the following configuration:

- VPC - required**: VPC-094675e084b80ced1 (python) 10.0.0.0/16
- Subnet Info**: subnet-0805842ae404e8cc (public) Owner: 193633228050 Availability Zone: us-east-1a IP addresses available: 32762 CIDR: 10.0.0.0/17
- Auto-assign public IP**: Enabled
- Firewall (security groups)**: A security group will be added to all network interfaces. Name: launch-wizard-17 Description: launch-wizard-17 created 2023-07-09T06:48:05.658Z

The right pane shows the **Summary** section with the following details:

- Number of instances: 1
- Software Image (AMI): Canonical, Ubuntu, 22.04 LTS, ami-053b0d53c279acc90
- Virtual server type (instance type): t2.micro
- Storage (volumes): 1 volume(s) - 8 GiB

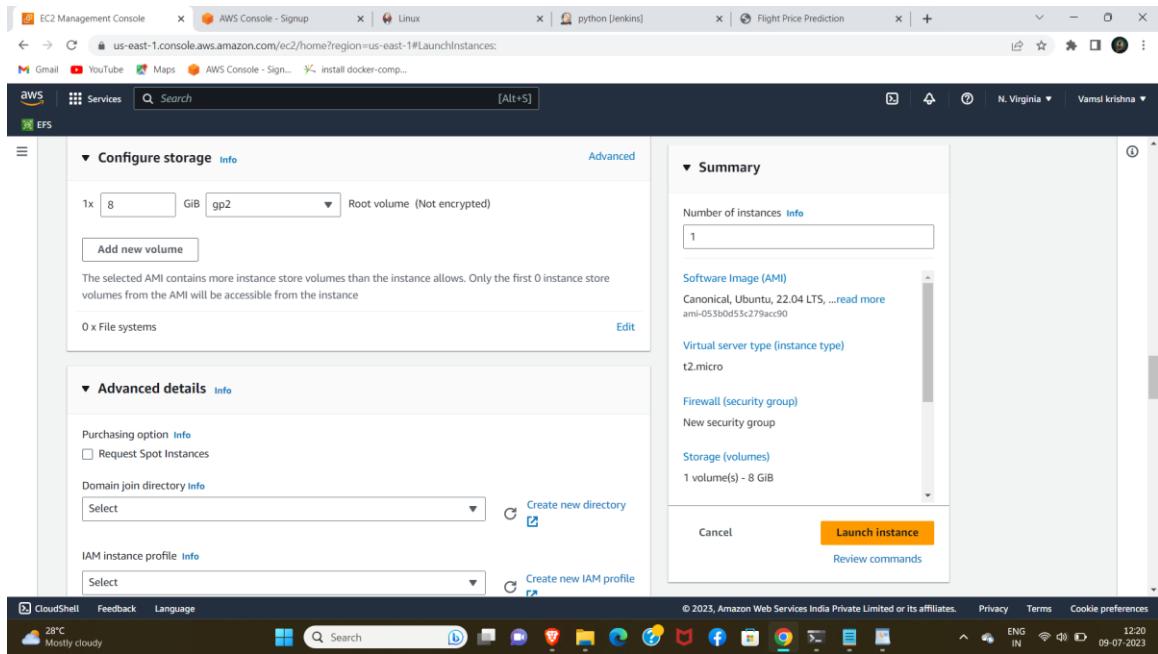
At the bottom, there are 'Launch instance' and 'Review commands' buttons.

The screenshot shows the AWS Management Console interface for viewing the security group rules for the launched instance. The left pane displays the 'Inbound Security Group Rules' section with the following rules:

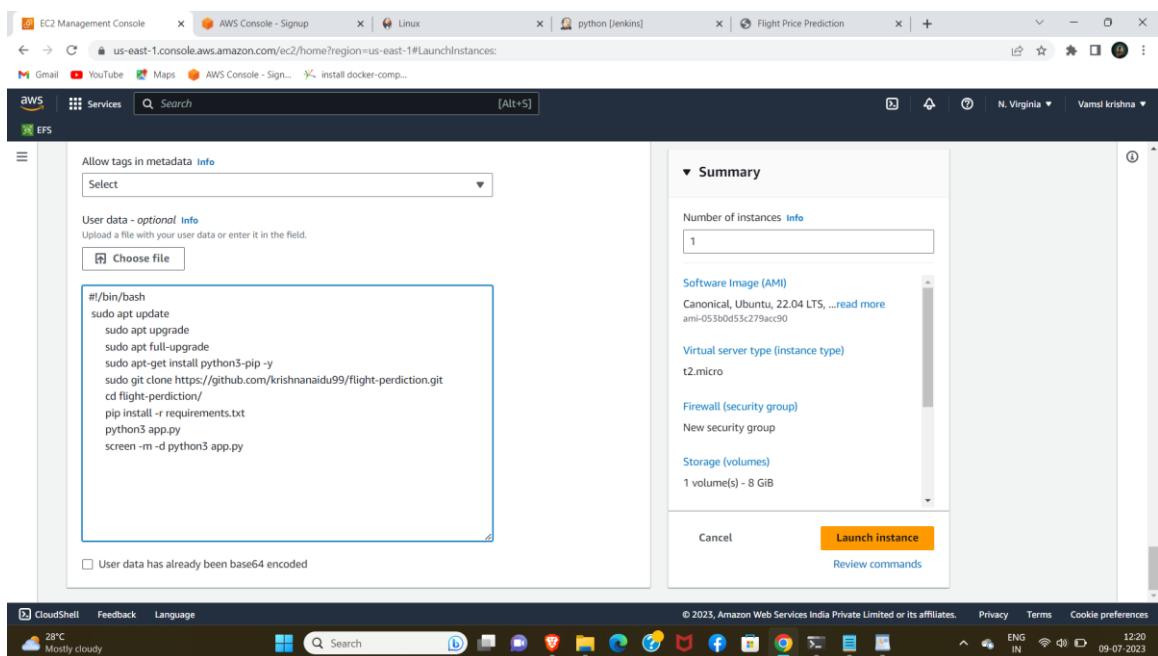
- Security group rule 1 (TCP, 22, 0.0.0.0/0)**:
 - Type: ssh
 - Protocol: TCP
 - Port range: 22
 - Source type: Anywhere
 - Description: e.g. SSH for admin desktop
- Security group rule 2 (TCP, 9000, Multiple sources)**:
 - Type: Custom TCP
 - Protocol: TCP
 - Port range: 9000
 - Source type: Anywhere
 - Description: e.g. SSH for admin desktop

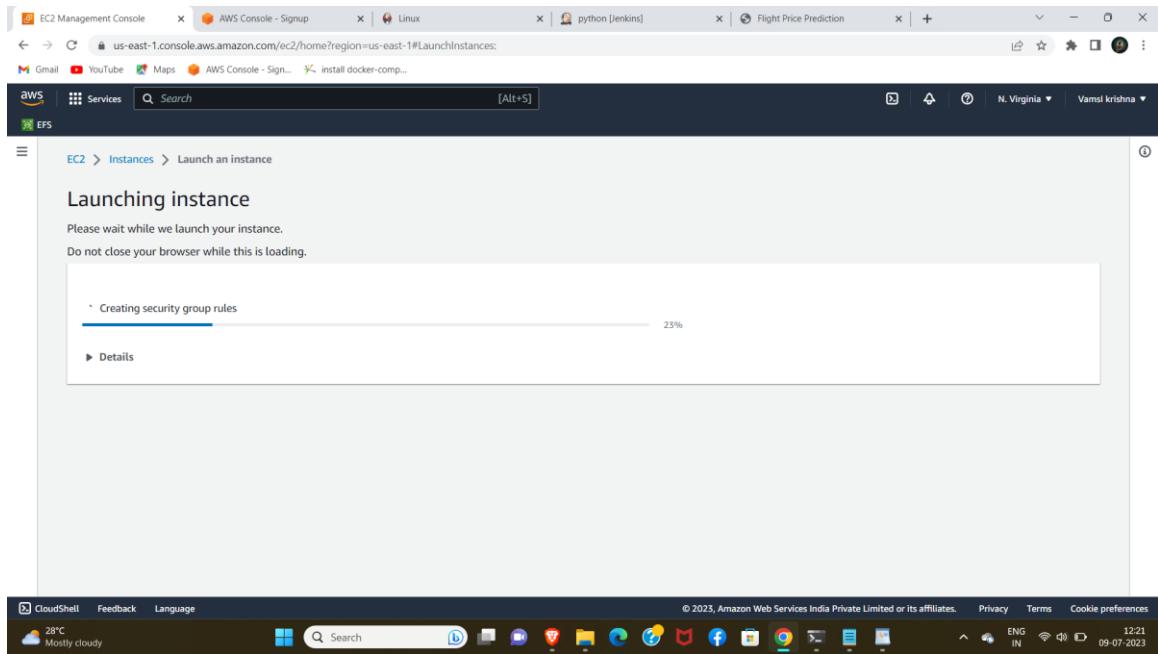
A warning message at the bottom states: "⚠️ Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting a specific source." The right pane shows the same summary information as the first screenshot.

2.click on advanced details

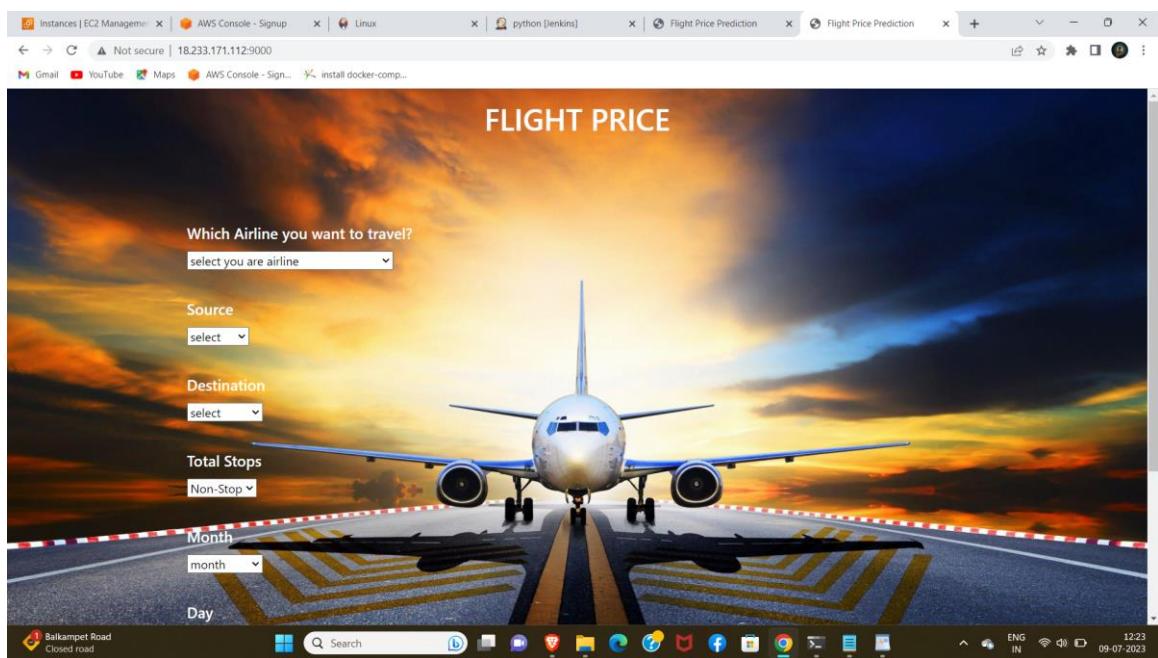


3.give commands in userdata and launch instance





4. browse public ip and see output



**DEPLOY GITHUB FLIGHT REPO
USING TERRAFORM**

1. create ec2 instance and connect to terminal

The screenshot shows the AWS CloudShell interface. At the top, there is a browser tab bar with multiple tabs open, including 'Instance details | EC2', 'AWS Console - Signin...', 'Linux', 'python [Jenkins]', 'Flight Price Prediction', 'Install Terraform | Ter...', and others. Below the browser is the AWS Management Console navigation bar with 'Services' selected, followed by a search bar and a 'New EC2 Experience' link.

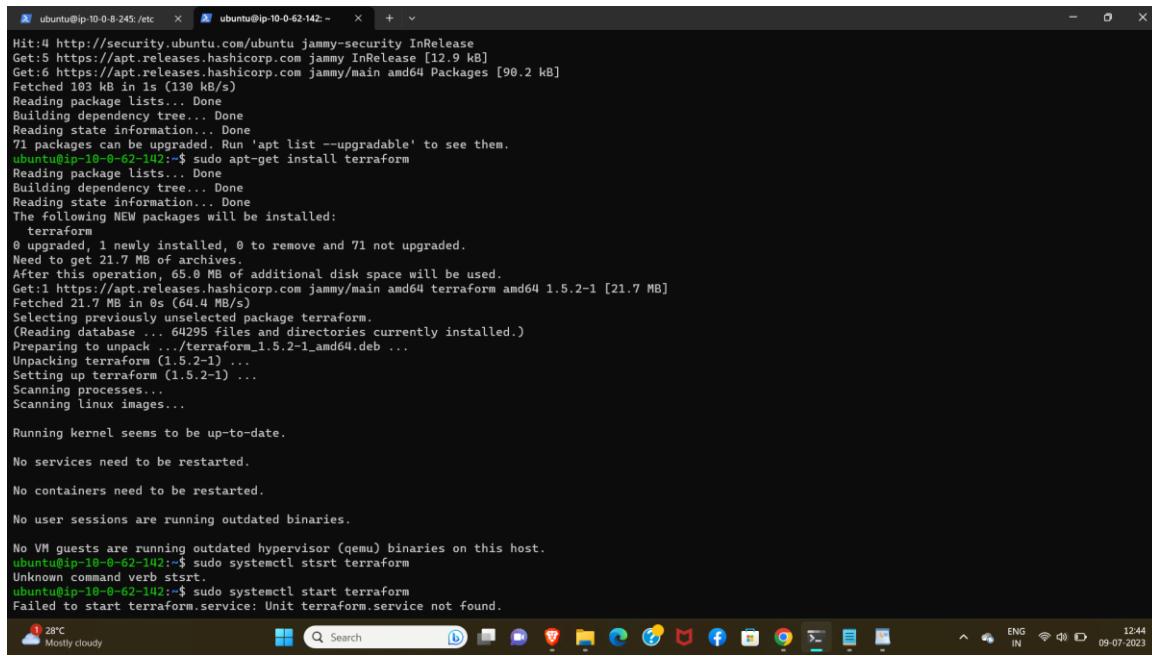
The main content area displays the 'EC2 > Instances' page for an instance named 'i-0b3764f1970419f5a (terraform)'. The 'Details' tab is selected, showing the following instance summary:

Instance ID	Public IPv4 address	Private IPv4 addresses
i-0b3764f1970419f5a (terraform)	44.206.234.8 open address	10.0.62.142
IPv6 address	Instance state	Public IPv4 DNS
-	Running	-
Hostname type	Private IP DNS name (IPv4 only)	Elastic IP addresses
IP name: ip-10-0-62-142.ec2.internal	ip-10-0-62-142.ec2.internal	-
Answer private resource DNS name	Instance type	AWS Compute Optimizer finding
-	t2.micro	Opt-in to AWS Compute Optimizer for recommendations. Learn more
Auto-assigned IP address	VPC ID	Auto Scaling Group name
44.206.234.8 [Public IP]	vpc-094675e084b80ced1 (python) View details	-
IAM Role	Subnet ID	CloudWatch Metrics
-	subnet-0805842ae40e4e8cc (pub) View details	-
IMDSv2		CloudWatch Logs
Optional		-

Below the details tab, there are tabs for Security, Networking, Storage, Status checks, Monitoring, and Tags.

At the bottom of the screen, there is a taskbar with various icons and a system status bar indicating '28°C Mostly cloudy', 'ENG IN', '12:40', and the date '09-07-2023'.

2.install terraform



```

Hit:4 http://security.ubuntu.com/ubuntu jammy-security InRelease
Get:5 https://apt.releases.hashicorp.com jammy InRelease [12.9 kB]
Get:6 https://apt.releases.hashicorp.com jammy/main amd64 Packages [90.2 kB]
Fetched 103 kB in 1s (138 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
71 packages can be upgraded. Run 'apt list --upgradable' to see them.
ubuntu@ip-10-0-62-142:~$ sudo apt-get install terraform
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
  terraform
0 upgraded, 1 newly installed, 0 to remove and 71 not upgraded.
Need to get 21.7 MB of archives.
After this operation, 65.0 MB of additional disk space will be used.
Get:1 https://apt.releases.hashicorp.com/jammy/main amd64 terraform amd64 1.5.2-1 [21.7 MB]
Fetched 21.7 MB in 0s (64.4 MB/s)
Selecting previously unselected package terraform.
(Reading database ... 64295 files and directories currently installed.)
Preparing to unpack .../terraform_1.5.2-1_amd64.deb ...
Unpacking terraform (1.5.2-1) ...
Setting up terraform (1.5.2-1) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

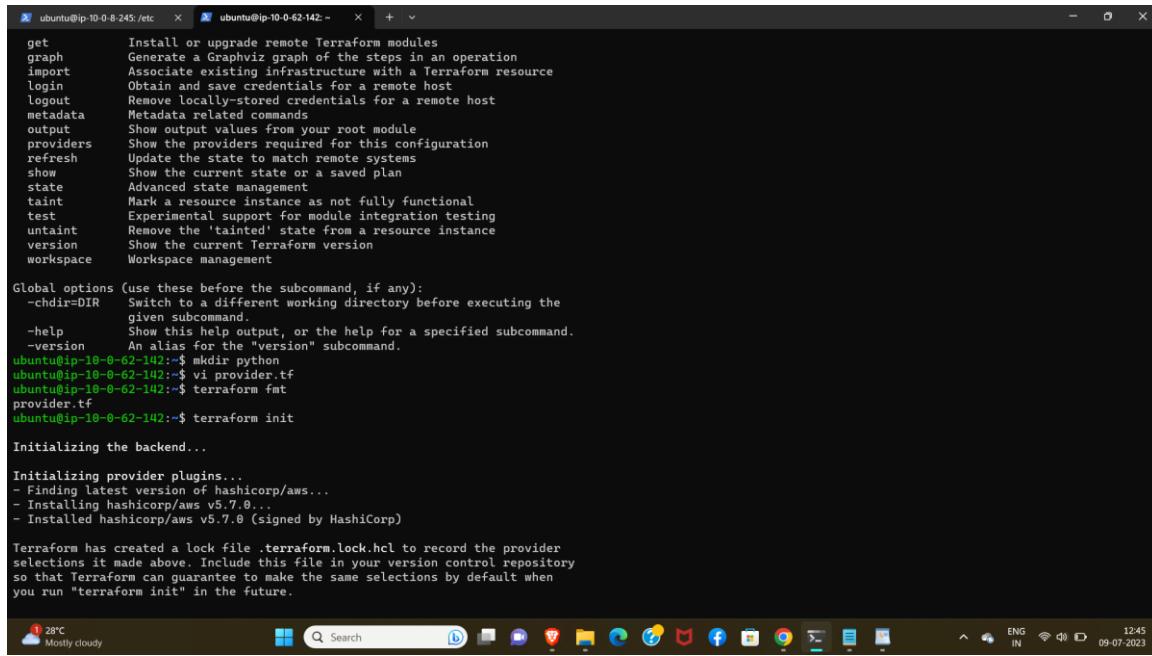
No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-10-0-62-142:~$ sudo systemctl start terraform
Unknown command systemctl.
ubuntu@ip-10-0-62-142:~$ sudo systemctl start terraform
Failed to start terraform.service: Unit terraform.service not found.

28°C Mostly cloudy

```

3. create mkdir file & create resources inside the file



```

get      Install or upgrade remote Terraform modules
graph    Generate a Graphviz graph of the steps in an operation
import   Associate existing infrastructure with a Terraform resource
login    Obtain and save credentials for a remote host
logout   Remove locally-stored credentials for a remote host
metadata Metadata related commands
output   Show output values from your root module
providers Show the providers required for this configuration
refresh  Update the state to match remote systems
show    Show the current state or a saved plan
state   Advanced state management
taint   Mark a resource instance as not fully functional
test    Experimental support for module integration testing
untaint Remove the 'tainted' state from a resource instance
version Show the current Terraform version
workspace Workspace management

Global options (use these before the subcommand, if any):
  -chdir=DIR  Switch to a different working directory before executing the
              given subcommand.
  -help       Show this help output, or the help for a specified subcommand.
  -version    An alias for the "version" subcommand.

ubuntu@ip-10-0-62-142:~$ mkdir python
ubuntu@ip-10-0-62-142:~$ vi provider.tf
ubuntu@ip-10-0-62-142:~$ terraform fmt
provider.tf
ubuntu@ip-10-0-62-142:~$ terraform init

Initializing the backend...

Initializing provider plugins...
- Finding latest version of hashicorp/aws...
- Installing hashicorp/aws v5.7.0...
- Installed hashicorp/aws v5.7.0 (signed by HashiCorp)

Terraform has created a lock file _terraform.lock.hcl to record the provider
selections it made above. Include this file in your version control repository
so that Terraform can guarantee to make the same selections by default when
you run "terraform init" in the future.

28°C Mostly cloudy

```

A. create provider file using vi file & init , validate, plan , apply that

```
ubuntu@ip-10-0-8-245:/etc ~ 28°C Mostly cloudy 12:48 09-07-2023
provider "aws" {
  region      = "us-east-1"
  access_key  = "AKIAS2FLOSUJPSIKH72X3"
  secret_key  = "pZu4Wx6pTUXRk7IXitAIeqF2/fLx49s6IYck/cod"
}

provider.tf 5L, 142B
```

```
ubuntu@ip-10-0-8-245:/etc ~ 28°C Mostly cloudy 12:48 09-07-2023
If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.
ubuntu@ip-10-0-62-142:~$ terraform validate
Success! The configuration is valid.

ubuntu@ip-10-0-62-142:~$ cd python
ubuntu@ip-10-0-62-142:~/python$ cd
ubuntu@ip-10-0-62-142:~$ vi provider.tf
ubuntu@ip-10-0-62-142:~$ rm -rf provider.tf
ubuntu@ip-10-0-62-142:~$ cd python
ubuntu@ip-10-0-62-142:~/python$ vi provider.tf
ubuntu@ip-10-0-62-142:~/python$ vi provider.tf
ubuntu@ip-10-0-62-142:~/python$ terraform init

Initializing the backend...

Initializing provider plugins...
- Finding latest version of hashicorp/aws...
- Installing hashicorp/aws v5.7.0...
- Installed hashicorp/aws v5.7.0 (signed by HashiCorp)

Terraform has created a lock file .terraform.lock.hcl to record the provider
selections it made above. Include this file in your version control repository
so that Terraform can guarantee to make the same selections by default when
you run "terraform init" in the future.

Terraform has been successfully initialized!

You may now begin working with Terraform. Try running "terraform plan" to see
any changes that are required for your infrastructure. All Terraform commands
should now work.

If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.
ubuntu@ip-10-0-62-142:~/python$ terraform validate
Success! The configuration is valid.

ubuntu@ip-10-0-62-142:~/python$ |
```

```

ubuntu@ip-10-0-8-245:/etc ~] [ ubuntu@ip-10-0-62-142:~/p] + ~
ubuntu@ip-10-0-62-142:~/python$ vi provider.tf
ubuntu@ip-10-0-62-142:~/python$ terraform init
Initializing the backend...
Initializing provider plugins...
- Finding latest version of hashicorp/aws...
- Installing hashicorp/aws v5.7.0...
- Installed hashicorp/aws v5.7.0 (signed by HashiCorp)

Terraform has created a lock file .terraform.lock.hcl to record the provider
selections it made above. Include this file in your version control repository
so that Terraform can guarantee to make the same selections by default when
you run "terraform init" in the future.

Terraform has been successfully initialized!

You may now begin working with Terraform. Try running "terraform plan" to see
any changes that are required for your infrastructure. All Terraform commands
should now work.

If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.
ubuntu@ip-10-0-62-142:~/python$ terraform validate
Success! The configuration is valid.

ubuntu@ip-10-0-62-142:~/python$ terraform plan
No changes. Your infrastructure matches the configuration.

Terraform has compared your real infrastructure against your configuration and found no differences, so no changes are needed.
ubuntu@ip-10-0-62-142:~/python$ terraform apply
No changes. Your infrastructure matches the configuration.

Terraform has compared your real infrastructure against your configuration and found no differences, so no changes are needed.

Apply complete! Resources: 0 added, 0 changed, 0 destroyed.
ubuntu@ip-10-0-62-142:~/python$ |
```

Ubuntu desktop interface showing the terminal window.

B. create a vpc file and apply

```

ubuntu@ip-10-0-8-245:/etc ~] [ ubuntu@ip-10-0-62-142:~/p] + ~
resource "aws_vpc" "my-vpc" {
  instance_tenancy = "default"
  cidr_block = "10.0.0.0/16"
  tags = {
    name = "my-vpc"
  }
}

"vpc.tf" 7L, 124B
```

Ubuntu desktop interface showing the terminal window.

```
ubuntu@ip-10-0-8-245:/etc ~  ubuntu@ip-10-0-62-142:~/p ~ + ~
- Installed hashicorp/aws v5.7.0 (signed by HashiCorp)

Terraform has created a lock file .terraform.lock.hcl to record the provider
selections it made above. Include this file in your version control repository
so that Terraform can guarantee to make the same selections by default when
you run "terraform init" in the future.

Terraform has been successfully initialized!

You may now begin working with Terraform. Try running "terraform plan" to see
any changes that are required for your infrastructure. All Terraform commands
should now work.

If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.
ubuntu@ip-10-0-62-142:~/python$ terraform validate
Success! The configuration is valid.

ubuntu@ip-10-0-62-142:~/python$ terraform plan
No changes. Your infrastructure matches the configuration.

Terraform has compared your real infrastructure against your configuration and found no differences, so no changes are needed.
ubuntu@ip-10-0-62-142:~/python$ terraform apply
No changes. Your infrastructure matches the configuration.

Terraform has compared your real infrastructure against your configuration and found no differences, so no changes are needed.

Apply complete! Resources: 0 added, 0 changed, 0 destroyed.
ubuntu@ip-10-0-62-142:~/python$ vi vpc.tf
ubuntu@ip-10-0-62-142:~/python$ vi vpc.tf
ubuntu@ip-10-0-62-142:~/python$ terraform fmt
vpc.tf
ubuntu@ip-10-0-62-142:~/python$ terraform validate
Success! The configuration is valid.

ubuntu@ip-10-0-62-142:~/python$ |
```



```
ubuntu@ip-10-0-8-245:/etc ~  ubuntu@ip-10-0-62-142:~/p ~ + ~
Success! The configuration is valid.

ubuntu@ip-10-0-62-142:~/python$ terraform apply --auto-approve
Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:
+ create

Terraform will perform the following actions:

# aws_vpc.my-vpc will be created
+ resource "aws_vpc" "my-vpc" {
    + arn
    + cidr_block
    + default_network_acl_id
    + default_route_table_id
    + default_security_group_id
    + dhcp_options_id
    + enable_dns_hostnames
    + enable_dns_support
    + enable_network_address_usage_metrics
    + id
    + instance_tenancy
    + ipv6_association_id
    + ipv6_cidr_block
    + ipv6_cidr_block_network_border_group
    + main_route_table_id
    + owner_id
    + tags
        + "name" = "my-vpc"
    }
    + tags_all
        + "name" = "my-vpc"
}

Plan: 1 to add, 0 to change, 0 to destroy.
aws_vpc.my-vpc: Creating...
aws_vpc.my-vpc: Creation complete after ls [id=vpc-080cdee5423046dd1]

Apply complete! Resources: 1 added, 0 changed, 0 destroyed.
ubuntu@ip-10-0-8-245:/etc ~  ubuntu@ip-10-0-62-142:~/p ~ + ~
28°C Mostly cloudy
```



now goto console and to see created vpc in console

The screenshot shows the AWS VPC console interface. On the left, there's a sidebar with options like EC2 Global View, Virtual private cloud, Subnets, Route tables, Internet gateways, Egress-only internet gateways, Carrier gateways, DHCP option sets, Elastic IPs, Managed prefix lists, Endpoints, Endpoint services, NAT gateways, and Peering connections. The main area displays a table titled "Your VPCs (3) Info" with the following data:

Name	VPC ID	State	IPv4 CIDR	IPv6 CIDR	DHCP o...
my-vpc	vpc-080cdee5423046dd1	Available	10.0.0.0/16	-	dopt-0a
python	vpc-094675e084b80ced1	Available	10.0.0.16	-	dopt-0a
-	vpc-040d3692be8897c57	Available	172.31.0.0/16	-	dopt-0a

Below the table, there's a section for the selected VPC (vpc-080cdee5423046dd1) with tabs for Details, Resource map, CIDRs, Flow logs, and Tags. The Details tab is active.

C. create a file for subnets

The screenshot shows a Windows PowerShell window with the following Terraform code:

```
resource "aws_subnet" "public" {
  vpc_id          = aws_vpc.my-vpc.id
  availability_zone = "us-east-1a"
  cidr_block      = "10.0.0.0/17"
  map_public_ip_on_launch = "true"

  tags = [
    { name = "public" }
  ]
}

resource "aws_subnet" "private" {
  vpc_id          = aws_vpc.my-vpc.id
  availability_zone = "us-east-1b"
  cidr_block      = "10.0.192.0/19"
  map_public_ip_on_launch = "false"

  tags = [
    { name = "private" }
  ]
}

"subnets.tf" 21L, 476B
```

```

Windows PowerShell      ubuntu@ip-10-0-62-142:~/p... + 
Apply complete! Resources: 0 added, 1 changed, 0 destroyed.
ubuntu@ip-10-0-62-142:~/python$ vi subnets.tf
ubuntu@ip-10-0-62-142:~/python$ terraform fmt
subnets.tf
ubuntu@ip-10-0-62-142:~/python$ terraform validate
Success! The configuration is valid.

ubuntu@ip-10-0-62-142:~/python$ terraform apply --auto-approve
ans_vpc.my-vpc: Refreshing state... [id=vpc-080cdee5423046dd1]

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:
+ create
~ update in-place

Terraform will perform the following actions:

# aws_subnet.private will be created
+ resource "aws_subnet" "private" {
  + arn = (known after apply)
  + assign_ipv6_address_on_creation = false
  + availability_zone = "us-east-1b"
  + availability_zone_id = (known after apply)
  + cidr_block = "10.0.192.0/19"
  + enable_dns64 = false
  + enable_resource_name_dns_a_record_on_launch = false
  + enable_resource_name_dns_aaaa_record_on_launch = false
  + id = (known after apply)
  + ipv6_cidr_block_association_id = (known after apply)
  + ipv6_native = false
  + map_public_ip_on_launch = false
  + owner_id = (known after apply)
  + private_dns_hostname_type_on_launch = (known after apply)
  + tags = {
    + "name" = "private"
  }
  + tags_all = {
    + "name" = "private"
  }
  + vpc_id = "vpc-080cdee5423046dd1"
}

Plan: 1 to add, 0 to change, 0 to destroy.

ubuntu@ip-10-0-62-142:~/p...

```

to see created in console

Name	Subnet ID	State	VPC	IPv4 CIDR	IPv6 CIDR
public	subnet-0d81f8c453769aeaa	Available	vpc-080cdee5423046dd1	10.0.0.0/17	-
private	subnet-067d005fd09730787	Available	vpc-040d3692be8897c57	172.31.16.0/20	-
-	subnet-036d5e392282018b4	Available	vpc-080cdee5423046dd1	10.0.192.0/19	-
pvt	subnet-07dc680b8368b9de1	Available	vpc-094675e084b80ced1 pyt...	10.0.192.0/18	-
pub	subnet-0805842ae40e4e8cc	Available	vpc-094675e084b80ced1 pyt...	10.0.0.0/17	-

D.create a file for internet gateway

```
Windows PowerShell      ubuntu@ip-10-0-62-142:~/p   + 
resource "aws_internet_gateway" "my-igw" {
  vpc_id = aws_vpc.my-vpc.id
  tags = [
    { name = "my-igw" }
  ]
}

"internetgateway.tf" 7L, 110B
```

```
Windows PowerShell      ubuntu@ip-10-0-62-142:~/p   + 
ubuntu@ip-10-0-62-142:~/python$ vi subnets.tf
ubuntu@ip-10-0-62-142:~/python$ vi internetgateway.tf
ubuntu@ip-10-0-62-142:~/python$ terraform apply --auto-approve
aws_vpc.my-vpc: Refreshing state... [id=vpc-080cddee5423046dd1]
aws_subnet.private: Refreshing state... [id=subnet-036d5e392282018b4]
aws_subnet.public: Refreshing state... [id=subnet-0d81f8c453769aeaa]

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:
+ create
~ update in-place

Terraform will perform the following actions:

# aws_internet_gateway.my-igw will be created
resource "aws_internet_gateway" "my-igw" {
  + arn      = (known after apply)
  + id       = (known after apply)
  + owner_id = (known after apply)
  + tags     = [
      + "name" = "my-igw"
    ]
  + tags_all = [
      + "name" = "my-igw"
    ]
  + vpc_id   = "vpc-080cddee5423046dd1"
}

# aws_subnet.public will be updated in-place
resource "aws_subnet" "public" {
  id           = "subnet-0d81f8c453769aeaa"
  ~ tags        = {
      - "Name" = "public" -> null
      "name" = "public"
    }
  ~ tags_all    = {
      - "Name" = "public" -> null
      # (1 unchanged element hidden)
    }
  # (15 unchanged attributes hidden)
}
```

Internet gateways (1/2) **Info**

Name	Internet gateway ID	State	VPC ID	Owner
my-igw	igw-040efd622f6fb18e1	Attached	vpc-080cddee5423046dd1	193633228050
igw	igw-0d7095de9355ff0c9	Attached	vpc-094675e084b80ced1 python	193633228050

igw-040efd622f6fb18e1 / my-igw

Details Tags

Details

Internet gateway ID igw-040efd622f6fb18e1	State Attached	VPC ID vpc-080cddee5423046dd1	Owner 193633228050
--	-------------------	----------------------------------	-----------------------

E.create a file for route table

```
resource "aws_route_table" "my-route" {
  vpc_id = aws_vpc.my-vpc.id

  route {
    cidr_block = "0.0.0.0/0"
    gateway_id = aws_internet_gateway.my-igw.id
  }

  tags = [
    name = "my-route"
  ]
}

"routetable.tf" 12L, 201B
```

```
Windows PowerShell      ubuntu@ip-10-0-62-142:~/p> + 
resource "aws_route_table_association" "my_rtass" {
  subnet_id   = aws_subnet.public.id
  route_table_id = aws_route_table.my-route.id
}

# routetable-ass.tf 4L, 141B
2,19          All
37°C Partly sunny
Search
ENG IN 14:27 09-07-2023
```

```
Windows PowerShell      ubuntu@ip-10-0-62-142:~/p> + 
ubuntu@ip-10-0-62-142:~/p> terraform apply --auto-approve
aws_vpc.my-vpc: Refreshing state... [id=vpc-080cde55423046dd1]
aws_subnet.public: Refreshing state... [id=subnet-0d81f8c453769aea]
aws_internet_gateway.my-igw: Refreshing state... [id=igw-040efd622f6fb18e1]
aws_subnet.private: Refreshing state... [id=subnet-036d5e39228201bb4]

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:
+ create
~ update in-place

Terraform will perform the following actions:

# aws_internet_gateway.my-igw will be updated in-place
~ resource "aws_internet_gateway" "my-igw" {
  id      = "igw-040efd622f6fb18e1"
  tags    = {
    - "Name" = "my-igw" -> null
    "name" = "my-igw"
  }
  ~ tags_all = {
    - "Name" = "my-igw" -> null
    # (1 unchanged element hidden)
  }
  # (3 unchanged attributes hidden)
}

# aws_route_table.my-route will be created
+ resource "aws_route_table" "my-route" {
  + arn            = (known after apply)
  + id             = (known after apply)
  + owner_id       = (known after apply)
  + propagating_vgws = (known after apply)
  + route          = [
    +
      + carrier_gateway_id      = ""
      + cidr_block              = "0.0.0.0/0"
      + core_network_arn        = ""
      + destination_prefix_list_id = ""
      + egress_only_gateway_id  = ""
    ]
}
```

Route tables (1/6) Info

Name	Route table ID	Explicit subnet associations	Edge associations	Main	VPC
pub	rtb-0a74041ce64b8d2a0	subnet-0805842ae40e4e8cc / pub	-	No	vpc-094675e
-	rtb-0b6f2961241e1b7b0	-	-	Yes	vpc-094675e
pvt	rtb-01fdbf04cf66618	subnet-07dc680b8368b9de1 / pvt	-	No	vpc-094675e
my-route	rtb-0d436dd547be0bf19	-	-	Yes	vpc-080cdee1
-	rtb-0efdfefb85f07c77d	-	-	Yes	vpc-040d369
my-route	rtb-0b436f8f8507661d1	-	-	No	vpc-080cdee1

rtb-0b436f8f8507661d1 / my-route

Details | Routes | Subnet associations | Edge associations | Route propagation | Tags

You can now check network connectivity with Reachability Analyzer

Run Reachability Analyzer

E.create a file for security groups

```

resource "aws_security_group" "my-sg" {
  name      = "my-sg"
  vpc_id    = aws_vpc.my-vpc.id
  ingress {
    from_port  = 22
    to_port    = 22
    protocol   = "tcp"
    cidr_blocks = ["0.0.0.0/0"]
  }
  ingress {
    from_port  = 9000
    to_port    = 9000
    protocol   = "tcp"
    cidr_blocks = ["0.0.0.0/0"]
  }
  egress {
    from_port  = 0
    to_port    = 0
    protocol   = "tcp"
    cidr_blocks = ["0.0.0.0/0"]
    ipv6_cidr_blocks = ["::/0"]
  }
  tags = [
    {name = "my-sg"}
  ]
}

```

-- INSERT --

```

Windows PowerShell [ubuntu@ip-10-0-62-142:~/p] + 
+ description      = ""
+ from_port       = 22
+ ipv6_cidr_blocks = []
+ prefix_list_ids = []
+ protocol        = "tcp"
+ security_groups = []
+ self_if          = false
+ to_port          = 22
},
+ {
+   cidr_blocks     = [
+     "0.0.0.0/0",
+   ]
+   description      = ""
+   from_port       = 9000
+   ipv6_cidr_blocks = []
+   prefix_list_ids = []
+   protocol        = "tcp"
+   security_groups = []
+   self_if          = false
+   to_port          = 9000
},
]
name           = "my-sg"
+ name_prefix    = (Known after apply)
- owner_id       = "193633228050" -> (known after apply)
tags           = {
  "name" = "my-sg"
}
# (4 unchanged attributes hidden)

Plan: 1 to add, 0 to change, 1 to destroy.
aws_security_group.my-sg: Destroying... [id=sg-0d8c8f7565063a134]
aws_security_group.my-sg: Destruction complete after 1s
aws_security_group.my-sg: Creating...
aws_security_group.my-sg: Creation complete after 2s [id=sg-0d107be7c56280720]

Apply complete! Resources: 1 added, 0 changed, 1 destroyed.
ubuntu@ip-10-0-62-142:~/python$ 

```

37°C Partly sunny 14:31 09-07-2023

Name	Security group ID	Security group name	VPC ID	Description	Owner
-	sg-05743f5e9dd0916d0	launch-wizard-14	vpc-094675e084b80ced1	launch-wizard-14 crea...	193633228050
-	sg-05eaf5d63f3e749f2	launch-wizard-10	vpc-040d3692b8897c57	launch-wizard-10 crea...	193633228050
-	sg-0135fa8e485d1c732	launch-wizard-6	vpc-094675e084b80ced1	launch-wizard-6 create...	193633228050
-	sg-0ba88f1508653a011	launch-wizard-11	vpc-094675e084b80ced1	launch-wizard-11 crea...	193633228050
-	sg-0143bb3f04985b485	default	vpc-080cc0ee5423046d1	default VPC security gr...	193633228050
-	sg-041077a874c707770	my-sg	vpc-094675e084b80ced1	My-SG by Terraform	102621279950

G.create a file for ec2 instance

```
Windows PowerShell      ubuntu@ip-10-0-62-142:~/p   +  ~
resource "aws_instance" "vamsi" {
  ami           = "ami-053bd53c279acc90"
  instance_type = "t2.micro"
  availability_zone = "us-east-1a"
  key_name     = "nani"
  vpc_security_group_ids = [aws_security_group.my_sg.id]
  subnet_id    = aws_subnet.public.id
  associate_public_ip_address = true
  #user_data    = file("userdata.sh")
  tags = [
    name = "vamsi"
  ]
}
~
```

```
Windows PowerShell      ubuntu@ip-10-0-62-142:~/p   +  ~
}
+ tags_all          = {
  + "name" = "vamsi"
}
+ tenancy           = (known after apply)
+ user_data         = (known after apply)
+ user_data_base64  = (known after apply)
+ user_data_replace_on_change = false
+ vpc_security_group_ids = [
  + "sg-0d107be7c56280720",
]
}

# aws_route_table.my-route will be updated in-place
~ resource "aws_route_table" "my-route" {
  ~ id           = "rtb-0b436f8f8507661d1"
  ~ tags          = {
    - "Name" = "my-route" -> null
    + "name" = "my-route"
  }
  ~ tags_all      = {
    - "Name" = "my-route" -> null
    # (1 unchanged element hidden)
  }
  # (5 unchanged attributes hidden)
}

Plan: 1 to add, 1 to change, 0 to destroy.
aws_instance.vamsi: Creating...
aws_route_table.my-route: Modifying... [id=rtb-0b436f8f8507661d1]
aws_route_table.my-route: Modifications complete after 0s [id=rtb-0b436f8f8507661d1]
aws_instance.vamsi: Still creating... [10s elapsed]
aws_instance.vamsi: Still creating... [20s elapsed]
aws_instance.vamsi: Still creating... [30s elapsed]
aws_instance.vamsi: Creation complete after 32s [id=i-04db1a4bf472e1727]

Apply complete! Resources: 1 added, 1 changed, 0 destroyed.
ubuntu@ip-10-0-62-142:~/python$ vi ec2.tf
ubuntu@ip-10-0-62-142:~/
```

The screenshot shows the AWS EC2 Management Console. On the left, there's a sidebar with navigation links like EC2 Dashboard, EC2 Global View, Events, Instances (with sub-links for Instances, Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Scheduled Instances, Capacity Reservations), Images (AMIs, AMI Catalog), and Elastic Block Store. The main area displays a table of instances. One instance, 'vamsi' with ID 'i-04db1a4bf472e1727', is selected and shown in more detail below. The instance details page includes tabs for Details, Security, Networking, Storage, Status Checks, Monitoring, and Tags. Under the Details tab, the 'Instance summary' section shows the Public IPv4 address (44.211.42.22), Instance state (Running), and Private IP DNS name (ip-10-0-33-107.ec2.internal). The status bar at the bottom indicates it's from 09-07-2023.

H. create a file for userdata

The screenshot shows a Windows PowerShell window titled 'Windows PowerShell'. It contains the following command and its output:

```
#!/bin/bash
sudo apt update
sudo apt upgrade
sudo apt full-upgrade
sudo apt-get install python3-pip -y
sudo git clone https://github.com/krishnanaidu99/flight-perdiction.git
cd flight-perdiction/
pip install -r requirements.txt
python3 app.py
screen -m -d python3 app.py
```

The command 'userdata.sh' was run, creating a file with 11L and 322B. The status bar at the bottom indicates it's from 09-07-2023.

```
Windows PowerShell      ubuntu@ip-10-0-62-142: ~/p      +  ~
resource "aws_instance" "vamsi" {
  ami           = "ami-053bd53c279acc90"
  instance_type = "t2.micro"
  availability_zone = "us-east-1a"
  key_name     = "nani"
  vpc_security_group_ids = [aws_security_group.my-sg.id]
  subnet_id    = aws_subnet.public.id
  associate_public_ip_address = true
  user_data     = file("userdata.sh")
  tags = [
    { name = "vamsi" }
  ]
}
~
```

"ec2.tf" 13L, 347B

31°C Haze 9,1 All 14:55 ENG IN 09-07-2023

```
Windows PowerShell      ubuntu@ip-10-0-62-142: ~/p      +  ~
aws_security_group.my-sg: Refreshing state... [id=sg-0d107be7c56280728]
aws_internet_gateway.my-igw: Refreshing state... [id=igw-040efdf622f6fb18e1]
aws_subnet.public: Refreshing state... [id=subnet-0d81f8c453769aaea]
aws_route_table.my-route: Refreshing state... [id=rtb-0b436f8f88507661d1]
aws_instance.vamsi: Refreshing state... [id=i-04db1a4bf472e1727]
aws_route_table_association.my-rtass: Refreshing state... [id=rtaassoc-0356c929e91a748b9]

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:
~ update in-place

Terraform will perform the following actions:

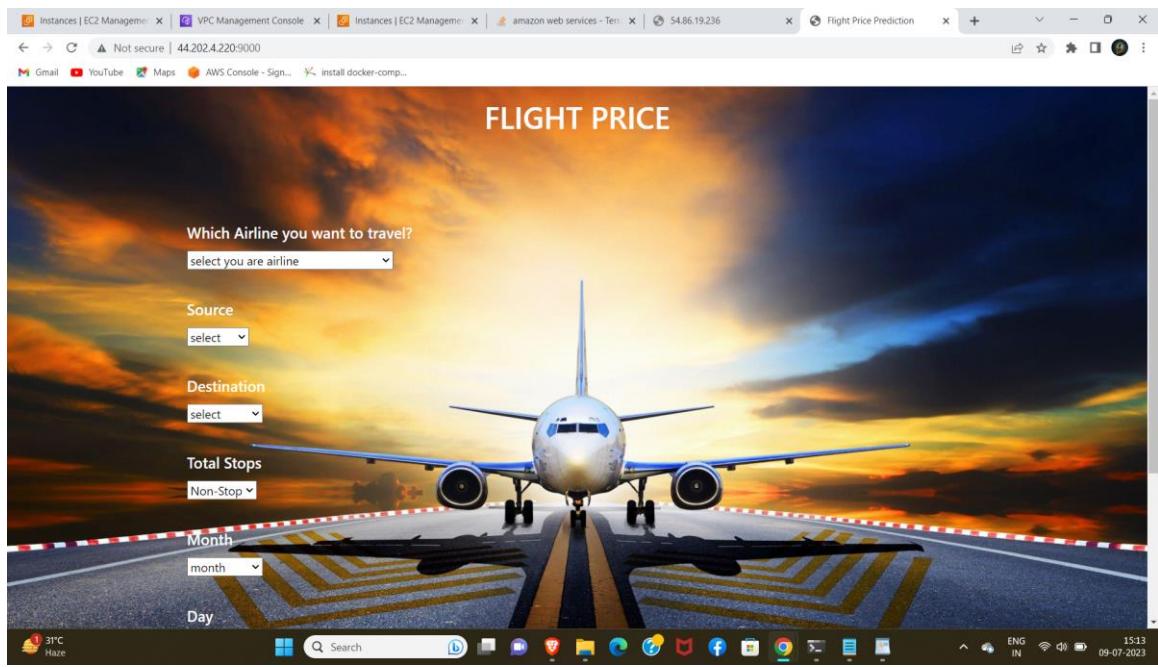
# aws_instance.vamsi will be updated in-place
~ resource "aws_instance" "vamsi" {
  id          = "i-04db1a4bf472e1727"
  tags        = {
    "Name" = "vamsi" -> null
    "name" = "vamsi"
  }
  ~ tags_all   = {
    "Name" = "vamsi" -> null
    # (1 unchanged element hidden)
  }
  + user_data  = "adf5ccac8ad7c33f1333e58f69e24cbc922fbfa9"
  # (38 unchanged attributes hidden)
  # (8 unchanged blocks hidden)
}

Plan: 0 to add, 1 to change, 0 to destroy.
aws_instance.vamsi: Modifying... [id=i-04db1a4bf472e1727]
aws_instance.vamsi: Still modifying... [id=i-04db1a4bf472e1727, 10s elapsed]
aws_instance.vamsi: Still modifying... [id=i-04db1a4bf472e1727, 20s elapsed]
aws_instance.vamsi: Still modifying... [id=i-04db1a4bf472e1727, 30s elapsed]
aws_instance.vamsi: Still modifying... [id=i-04db1a4bf472e1727, 40s elapsed]
aws_instance.vamsi: Still modifying... [id=i-04db1a4bf472e1727, 50s elapsed]
aws_instance.vamsi: Still modifying... [id=i-04db1a4bf472e1727, 1m0s elapsed]
aws_instance.vamsi: Modifications complete after 1m0s [id=i-04db1a4bf472e1727]

Apply complete! Resources: 0 added, 1 changed, 0 destroyed.
```

31°C Haze 14:55 ENG IN 09-07-2023

5.then browse public ip to see output



TASK - 2

STEP -1

1.Goto github and create a private repo and push all the resources in github

The screenshot shows a GitHub repository page for 'python-pip-' under the user 'krishnanaidu99'. The repository is private. The page includes sections for 'Set up GitHub Copilot', 'Invite collaborators', and 'Quick setup' which provides command-line instructions for cloning the repository.

```
echo "# python-pip-" >> README.md
git init
git add README.md
git commit -m "first commit"
git branch -M main
git remote add origin https://github.com/krishnanaidu99/python-pip-.git
git push -u origin main
```

The screenshot shows a Microsoft Word document containing terminal command-line output from an Ubuntu 20.04 LTS system. The commands relate to cloning a GitHub repository and managing its local state.

```
ubuntu@ip-10-0-47-79:~$ sudo git clone https://github.com/krishnanaidu99/python-pip-.git
Cloning into 'python-pip-'...
Username for 'https://github.com': krishnanaidu99
Password for 'https://krishnanaidu99@github.com':
warning: You appear to have cloned an empty repository.
ubuntu@ip-10-0-47-79:~$ ls
ec2.tf provider.tf routetable.tf    securitygrups.tf  terraform.tfstate      userdata.sh
igw.tf  python-pip-  rtassociation.tf subnets.tf      terraform.tfstate.backup  vpc.tf
ubuntu@ip-10-0-47-79:~$ git remote -v
fatal: not a git repository (or any of the parent directories): .git
ubuntu@ip-10-0-47-79:~$ cd python-pip/
ubuntu@ip-10-0-47-79:~/python-pip$ ls
ubuntu@ip-10-0-47-79:~/python-pip$ git remote -v
fatal: detected dubious ownership in repository at '/home/ubuntu/python-pip-'
To add an exception for this directory, call:

    git config --global --add safe.directory /home/ubuntu/python-pip-
ubuntu@ip-10-0-47-79:~/python-pip$ git config --global --add safe.directory /home/ubuntu/python-pip-
ubuntu@ip-10-0-47-79:~/python-pip$ git add .
fatal: Unable to create '/home/ubuntu/python-pip-/.git/index.lock': Permission denied
ubuntu@ip-10-0-47-79:~/python-pip$ sudo git add .
ubuntu@ip-10-0-47-79:~/python-pip$ ls
ubuntu@ip-10-0-47-79:~/python-pip$ pwd
/home/ubuntu/python-pip-
ubuntu@ip-10-0-47-79:~/python-pip$ cd
ubuntu@ip-10-0-47-79:~$ sudo git mv ec2.tf securitygrups.tf routetable.tf rtassociation.tf provider.tf igw.tf
```

```
ubuntu@ip-10-0-47-79:~/pyt ~ + ~
ubuntu@ip-10-0-47-79:~/python-pip$ git remote -v
fatal: detected dubious ownership in repository at '/home/ubuntu/python-pip'
To add an exception for this directory, call:
    git config --global --add safe.directory /home/ubuntu/python-pip-
ubuntu@ip-10-0-47-79:~/python-pip$ git config --global --add safe.directory /home/ubuntu/python-pip-
ubuntu@ip-10-0-47-79:~/python-pip$ git add .
fatal: Unable to create '/home/ubuntu/python-pip/.git/index.lock': Permission denied
ubuntu@ip-10-0-47-79:~/python-pip$ sudo git add .
ubuntu@ip-10-0-47-79:~/python-pip$ ls
ubuntu@ip-10-0-47-79:~/python-pip$ pwd
/home/ubuntu/python-pip-
ubuntu@ip-10-0-47-79:~/python-pip$ cd
ubuntu@ip-10-0-47-79:~/$ sudo mv ec2.tf securitygrps.tf routetable.tf rtassociation.tf provider.tf igw.tf
userdata.sh subnets.tf vpc.tf /home/ubuntu/python-pip-
fatal: not a git repository (or any of the parent directories): .git
ubuntu@ip-10-0-47-79:~/$ sudo mv ec2.tf securitygrps.tf routetable.tf rtassociation.tf provider.tf igw.tf userdata.sh subnets.tf vpc.tf /home/ubuntu/python-pip-
ubuntu@ip-10-0-47-79:~/$ cd python-pip/
ubuntu@ip-10-0-47-79:~/python-pip$ ls
ec2.tf provider.tf rtassociation.tf subnets.tf vpc.tf
igw.tf routetable.tf securitygrps.tf userdata.sh
ubuntu@ip-10-0-47-79:~/python-pip$ git status
On branch main

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    ec2.tf
    igw.tf
    provider.tf
    routetable.tf
    rtassociation.tf
    securitygrps.tf
```

31°C Windy tomorrow Search ENG IN 1805 10-07-2023

```
ubuntu@ip-10-0-47-79:~/pyt ~ + ~
userdata.sh
vpc.tf

nothing added to commit but untracked files present (use "git add" to track)
ubuntu@ip-10-0-47-79:~/python-pip$ git add .
fatal: Unable to create '/home/ubuntu/python-pip/.git/index.lock': Permission denied
ubuntu@ip-10-0-47-79:~/python-pip$ sudo git add .
ubuntu@ip-10-0-47-79:~/python-pip$ git status
On branch main

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:   ec2.tf
    new file:   igw.tf
    new file:   provider.tf
    new file:   routetable.tf
    new file:   rtassociation.tf
    new file:   securitygrps.tf
    new file:   subnets.tf
    new file:   userdata.sh
    new file:   vpc.tf

ubuntu@ip-10-0-47-79:~/python-pip$ git commit -m"files"
fatal: Unable to create '/home/ubuntu/python-pip/.git/index.lock': Permission denied
ubuntu@ip-10-0-47-79:~/python-pip$ sudo git commit -m"files"
Author identity unknown

*** Please tell me who you are.

Run

git config --global user.email "you@example.com"
git config --global user.name "Your Name"
```

31°C Windy tomorrow Search ENG IN 1805 10-07-2023

```
ubuntu@ip-10-0-47-79:~/pyt x + v

to set your account's default identity.
Omit --global to set the identity only in this repository.

fatal: unable to auto-detect email address (got 'root@ip-10-0-47-79.(none)')
ubuntu@ip-10-0-47-79:~/python-pip$ git config --global user.email "gandhamvamsi628@gmail.com"
ubuntu@ip-10-0-47-79:~/python-pip$ git config --global user.name "krishnanaidu99"
ubuntu@ip-10-0-47-79:~/python-pip$ sudo git commit -m"files"
Author identity unknown

*** Please tell me who you are.

Run

git config --global user.email "you@example.com"
git config --global user.name "Your Name"

to set your account's default identity.
Omit --global to set the identity only in this repository.

fatal: unable to auto-detect email address (got 'root@ip-10-0-47-79.(none)')
ubuntu@ip-10-0-47-79:~/python-pip$ git remote -v
origin https://github.com/krishnanaidu99/python-pip-.git (fetch)
origin https://github.com/krishnanaidu99/python-pip-.git (push)
ubuntu@ip-10-0-47-79:~/python-pip$ sudo git commit -m"files"
Author identity unknown

*** Please tell me who you are.

Run

git config --global user.email "you@example.com"
git config --global user.name "Your Name"

to set your account's default identity.
```

31°C Partly sunny  ENG IN 1806 10-07-2023

```
Windows PowerShell x + v

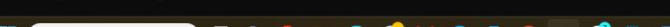
ubuntu@ip-10-0-47-79:~$ ls
python-pip- terraform.tfstate  terraform.tfstate.backup
ubuntu@ip-10-0-47-79:~$ git mv terraform.tfstate terraform.tfstate.backup
fatal: not a git repository (or any of the parent directories): .git
ubuntu@ip-10-0-47-79:~$ git mv terraform.tfstate terraform.tfstate.backup /home/ubuntu/python-pip-
fatal: not a git repository (or any of the parent directories): .git
ubuntu@ip-10-0-47-79:~$ sudo mv terraform.tfstate terraform.tfstate.backup /home/ubuntu/python-pip-
ubuntu@ip-10-0-47-79:~$ cd python-pip/
ubuntu@ip-10-0-47-79:~/python-pip$ ls
ec2.tf provider.tf rtassociation.tf subnets.tf      terraform.tfstate.backup  vpc.tf
igw.tf routetable.tf securitygrps.tf  terraform.tfstate  userdata.sh
ubuntu@ip-10-0-47-79:~/python-pip$ git status
On branch main

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:   ec2.tf
    new file:   igw.tf
    new file:   provider.tf
    new file:   routetable.tf
    new file:   rtassociation.tf
    new file:   securitygrps.tf
    new file:   subnets.tf
    new file:   userdata.sh
    new file:   vpc.tf

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    terraform.tfstate
    terraform.tfstate.backup

ubuntu@ip-10-0-47-79:~/python-pip$ git commit -m"files"
fatal: Unable to create '/home/ubuntu/python-pip/.git/index.lock': Permission denied
```

31°C Partly sunny  ENG IN 1806 10-07-2023

```
Windows PowerShell x + - 

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    terraform.tfstate
    terraform.tfstate.backup

ubuntu@ip-10-0-47-79:~/python-pip-$ git commit -m"files"
fatal: Unable to create '/home/ubuntu/python-pip/.git/index.lock': Permission denied
ubuntu@ip-10-0-47-79:~/python-pip-$ sudo git commit -m"files"
[main (root-commit) d67974c] files
 9 files changed, 121 insertions(+)
 create mode 100644 ec2.tf
 create mode 100644 igw.tf
 create mode 100644 provider.tf
 create mode 100644 routetable.tf
 create mode 100644 rtassociation.tf
 create mode 100644 securitygrups.tf
 create mode 100644 subnets.tf
 create mode 100644 userdata.sh
 create mode 100644 vpc.tf
ubuntu@ip-10-0-47-79:~/python-pip-$ sudo git push
Username for 'https://github.com': krishnanaidu99
Password for 'https://krishnanaidu99@github.com':
Enumerating objects: 11, done.
Counting objects: 100% (11/11), done.
Compressing objects: 100% (11/11), done.
Writing objects: 100% (11/11), 1.84 KiB | 1.84 MiB/s, done.
Total 11 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/krishnanaidu99/python-pip-.git
 * [new branch]      main -> main
ubuntu@ip-10-0-47-79:~/python-pip-$ client_loop: send disconnect: Connection reset
PS C:\Users\gandh\Downloads> |
```

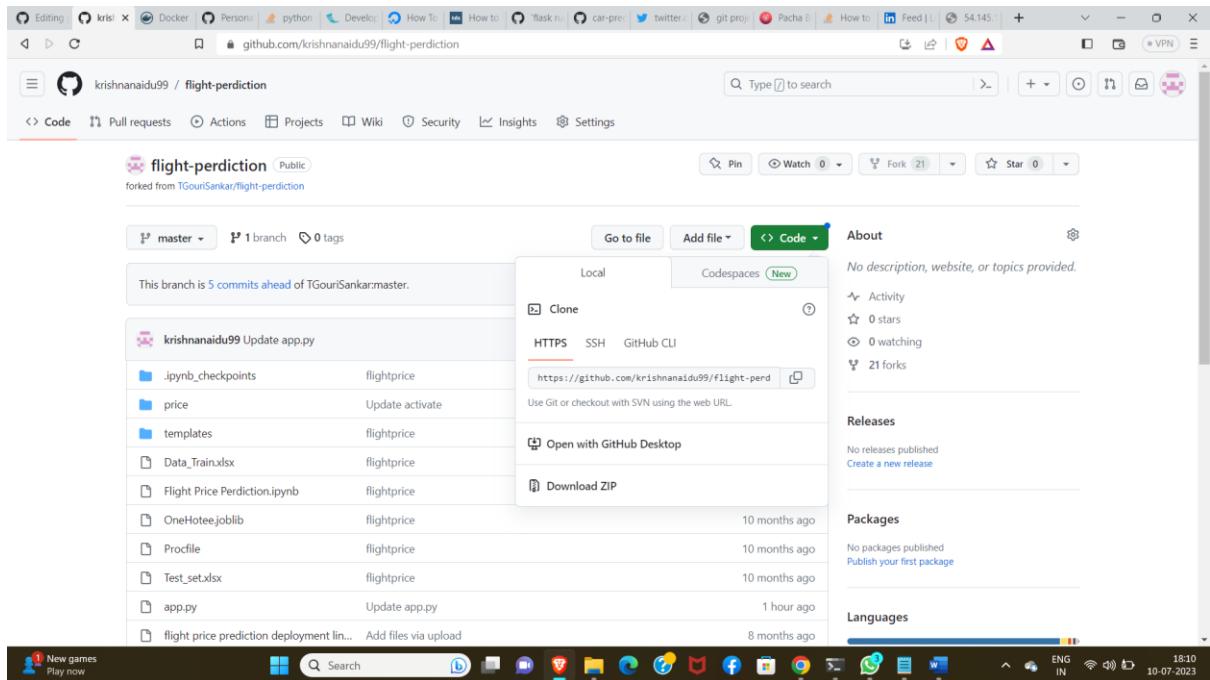


2, Goto git hub and check that repo

The screenshot shows a GitHub repository page for the user 'krishnanaidu99'. The repository name is 'python-pip-'. The page displays a list of 9 files: ec2.tf, igw.tf, provider.tf, routetable.tf, rtassociation.tf, securitygrups.tf, subnets.tf, userdata.sh, and vpc.tf. All files were committed 14 minutes ago. The repository is private, has 1 branch, and 0 tags. The 'About' section notes 'No description, website, or topics provided.' It also shows 0 stars, 1 watching, and 0 forks. The 'Releases' section indicates 'No releases published' and 'Create a new release'. The 'Languages' section shows HCL at 90.0% and Shell at 10.0%. The GitHub interface includes standard navigation buttons like 'Code', 'Issues', 'Pull requests', 'Actions', 'Projects', 'Security', 'Insights', and 'Settings'.

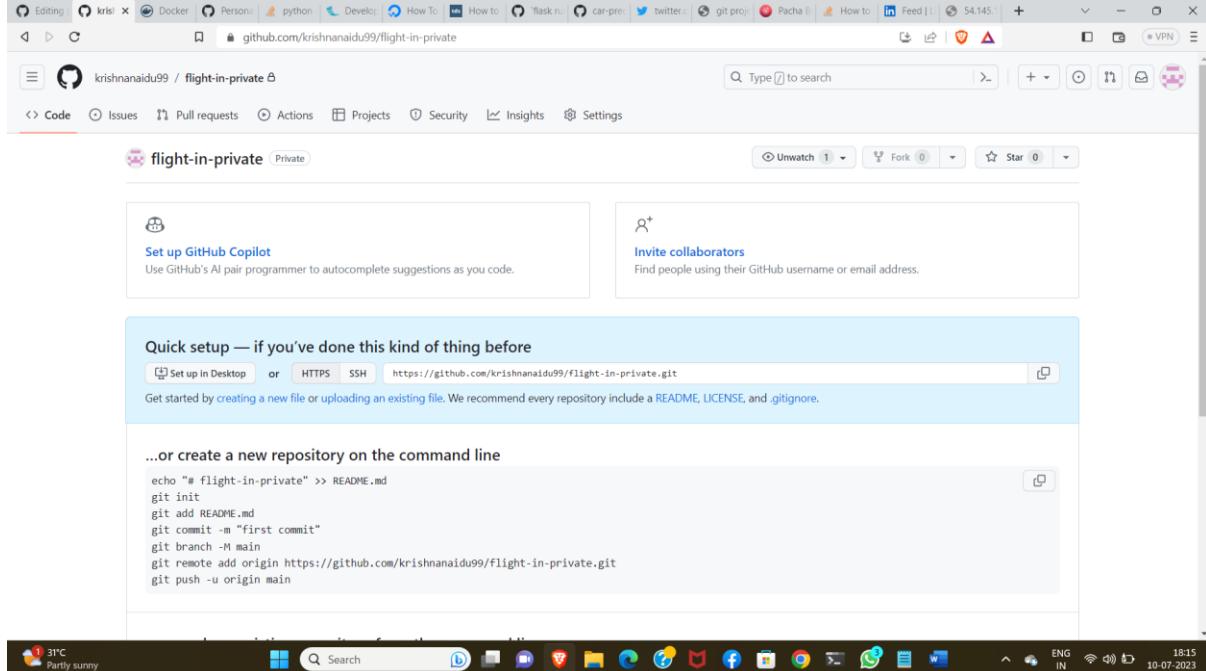
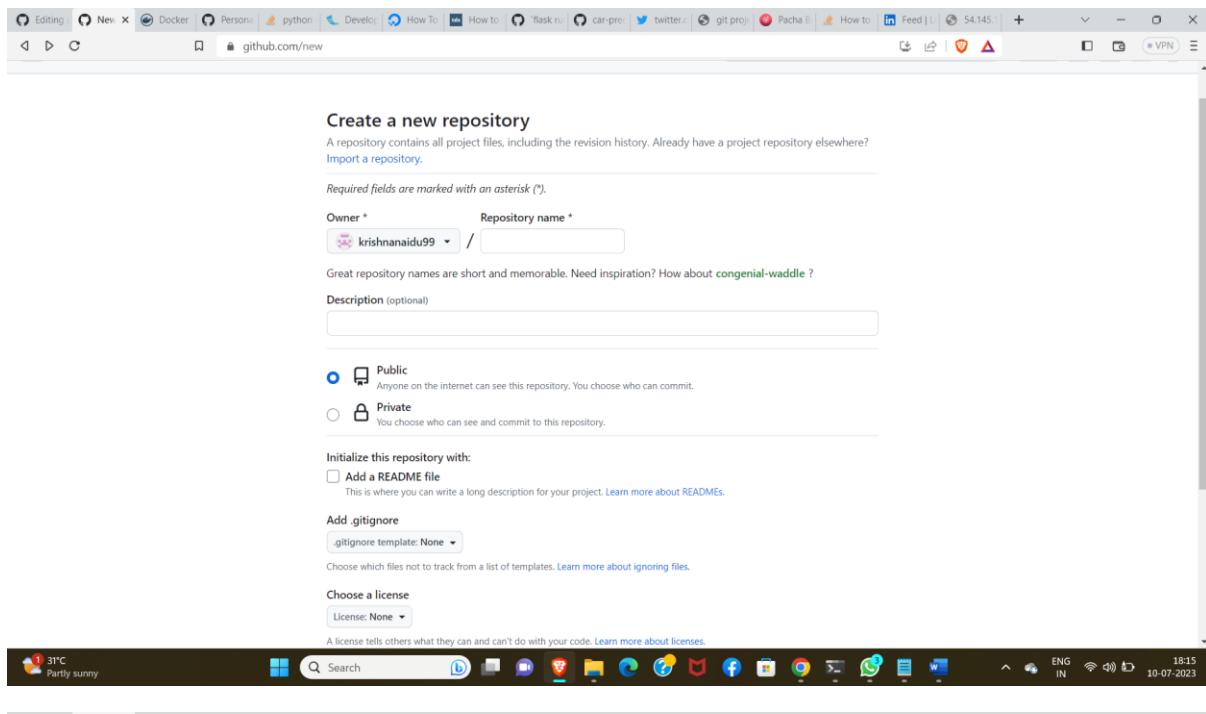
STEP-2

1. clone into another repo & go into the directory



```
ubuntu@ip-10-0-47-79:~$ sudo git clone https://github.com/krishnanaidu99/flight-perdiction.git
Cloning into 'flight-perdiction'...
remote: Enumerating objects: 10836, done.
remote: Counting objects: 100% (20/20), done.
remote: Compressing objects: 100% (19/19), done.
remote: Total 10836 (delta 7), reused 0 (delta 0), pack-reused 10816
Receiving objects: 100% (10836/10836), 84.41 MiB | 19.89 MiB/s, done.
Resolving deltas: 100% (878/878), done.
Updating files: 100% (10351/10351), done.
ubuntu@ip-10-0-47-79:~$ cd flight-perdiction/
ubuntu@ip-10-0-47-79:~/flight-perdiction$ |
```

2.create a private repo and clone that repo



```
ubuntu@ip-10-0-47-79:~/flight-perdiction$ sudo git clone https://github.com/krishnanaidu99/flight-in-private.git
Cloning into 'flight-in-private'...
Username for 'https://github.com': krishnanaidu99
Password for 'https://krishnanaidu99@github.com':
warning: You appear to have cloned an empty repository.
ubuntu@ip-10-0-47-79:~/flight-perdiction$ ls
```

3. go into that repo

```
ubuntu@ip-10-0-47-79:~/flight-perdiction$ cd flight-in-private/
ubuntu@ip-10-0-47-79:~/flight-perdiction/flight-in-private$ ls
ubuntu@ip-10-0-47-79:~/flight-perdiction/flight-in-private$ |
```

4.move all the resources localrepo to private repo

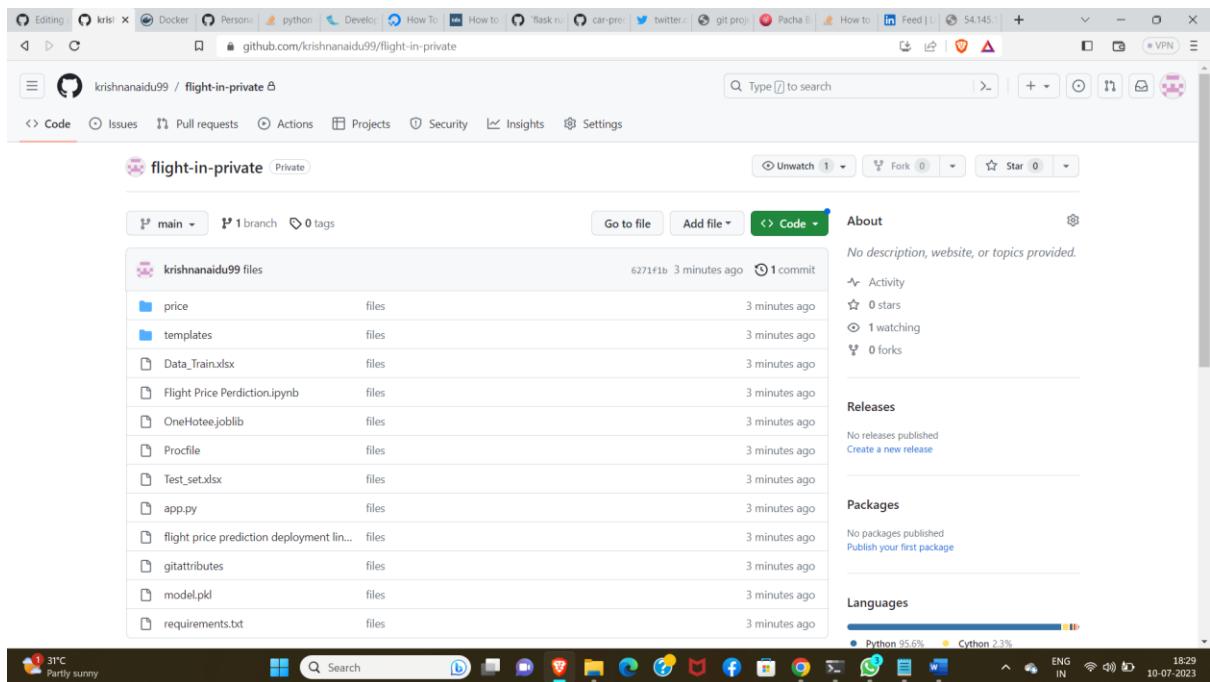
And add & commit &push

```
ubuntu@ip-10-0-47-79:~/flig ~ + 
create mode 100644 price/Lib/site-packages/sklearn/tests/__pycache__/_test_multiclass.cpython-310.pyc
create mode 100644 price/Lib/site-packages/sklearn/tests/__pycache__/_test_multioutput.cpython-310.pyc
create mode 100644 price/Lib/site-packages/sklearn/tests/__pycache__/_test_naive_bayes.cpython-310.pyc
create mode 100644 price/Lib/site-packages/sklearn/tests/__pycache__/_test_pipeline.cpython-310.pyc
create mode 100644 price/Lib/site-packages/sklearn/tests/__pycache__/_test_random_projection.cpython-310.pyc
create mode 100644 price/Lib/site-packages/sklearn/tests/random_seed.py
create mode 100644 price/Lib/site-packages/sklearn/tests/test_base.py
create mode 100644 price/Lib/site-packages/sklearn/tests/test_build.py
create mode 100644 price/Lib/site-packages/sklearn/tests/test_calibration.py
create mode 100644 price/Lib/site-packages/sklearn/tests/test_check_build.py
create mode 100644 price/Lib/site-packages/sklearn/tests/test_common.py
create mode 100644 price/Lib/site-packages/sklearn/tests/test_config.py
create mode 100644 price/Lib/site-packages/sklearn/tests/test_discriminant_analysis.py
create mode 100644 price/Lib/site-packages/sklearn/tests/test_docstring_parameters.py
create mode 100644 price/Lib/site-packages/sklearn/tests/test_docstrings.py
create mode 100644 price/Lib/site-packages/sklearn/tests/test_dummy.py
create mode 100644 price/Lib/site-packages/sklearn/tests/test_init.py
create mode 100644 price/Lib/site-packages/sklearn/tests/test_isotonic.py
create mode 100644 price/Lib/site-packages/sklearn/tests/test_kernel_approximation.py
create mode 100644 price/Lib/site-packages/sklearn/tests/test_kernel_ridge.py
create mode 100644 price/Lib/site-packages/sklearn/tests/test_metaestimators.py
create mode 100644 price/Lib/site-packages/sklearn/tests/test_min_dependencies_readme.py
create mode 100644 price/Lib/site-packages/sklearn/tests/test_multiclass.py
create mode 100644 price/Lib/site-packages/sklearn/tests/test_multioutput.py
create mode 100644 price/Lib/site-packages/sklearn/tests/test_naive_bayes.py
create mode 100644 price/Lib/site-packages/sklearn/tests/test_pipeline.py
create mode 100644 price/Lib/site-packages/sklearn/tests/test_random_projection.py
create mode 100644 price/Lib/site-packages/sklearn/tree/__init__.py
create mode 100644 price/Lib/site-packages/sklearn/tree/__pycache__/_init__.cpython-310.pyc
create mode 100644 price/Lib/site-packages/sklearn/tree/__pycache__/_classes.cpython-310.pyc
create mode 100644 price/Lib/site-packages/sklearn/tree/__pycache__/_export.cpython-310.pyc
create mode 100644 price/Lib/site-packages/sklearn/tree/__pycache__/_reingold_tilford.cpython-310.pyc
create mode 100644 price/Lib/site-packages/sklearn/tree/__pycache__/_setup.cpython-310.pyc
create mode 100644 price/Lib/site-packages/sklearn/tree/_classes.py
create mode 100644 price/Lib/site-packages/sklearn/tree/_criterion.cp310-win_amd64.pyd

31°C Partly sunny 18:28 ENG IN 10-07-2023
```

```
ubuntu@ip-10-0-47-79:~/flig ~ + 
create mode 100644 price/Lib/site-packages/werkzeug/wrappers/__init__.py
create mode 100644 price/Lib/site-packages/werkzeug/wrappers/__pycache__/_init__.cpython-310.pyc
create mode 100644 price/Lib/site-packages/werkzeug/wrappers/__pycache__/_request.cpython-310.pyc
create mode 100644 price/Lib/site-packages/werkzeug/wrappers/__pycache__/_response.cpython-310.pyc
create mode 100644 price/Lib/site-packages/werkzeug/wrappers/request.py
create mode 100644 price/Lib/site-packages/werkzeug/wrappers/response.py
create mode 100644 price/Scripts/Activate.ps1
create mode 100644 price/Scripts/activate
create mode 100644 price/Scripts/activate.bat
create mode 100644 price/Scripts/deactivate
create mode 100644 price/Scripts/f2py.exe
create mode 100644 price/Scripts/flask.exe
create mode 100644 price/Scripts/pip.exe
create mode 100644 price/Scripts/pip3.10.exe
create mode 100644 price/Scripts/pip3.exe
create mode 100644 price/Scripts/python.exe
create mode 100644 price/Scripts/pythonw.exe
create mode 100644 price/pyvenv.cfg
create mode 100644 requirements.txt
create mode 100644 templates/home.html
ubuntu@ip-10-0-47-79:~/flight-perdition/flight-in-private$ sudo git push
Username for 'https://github.com': krishnanaidu99
Password for 'https://krishnanaidu99@github.com':
Enumerating objects: 10815, done.
Counting objects: 100% (10815/10815), done.
Compressing objects: 100% (9863/9863), done.
Writing objects: 100% (10815/10815), 84.01 MiB | 30.90 MiB/s, done.
Total 10815 (delta 874), reused 10815 (delta 874), pack-reused 0
remote: Resolving deltas: 100% (874/874), done.
To https://github.com/krishnanaidu99/flight-in-private.git
 * [new branch]      main -> main
ubuntu@ip-10-0-47-79:~/flight-perdition/flight-in-private$ |
```

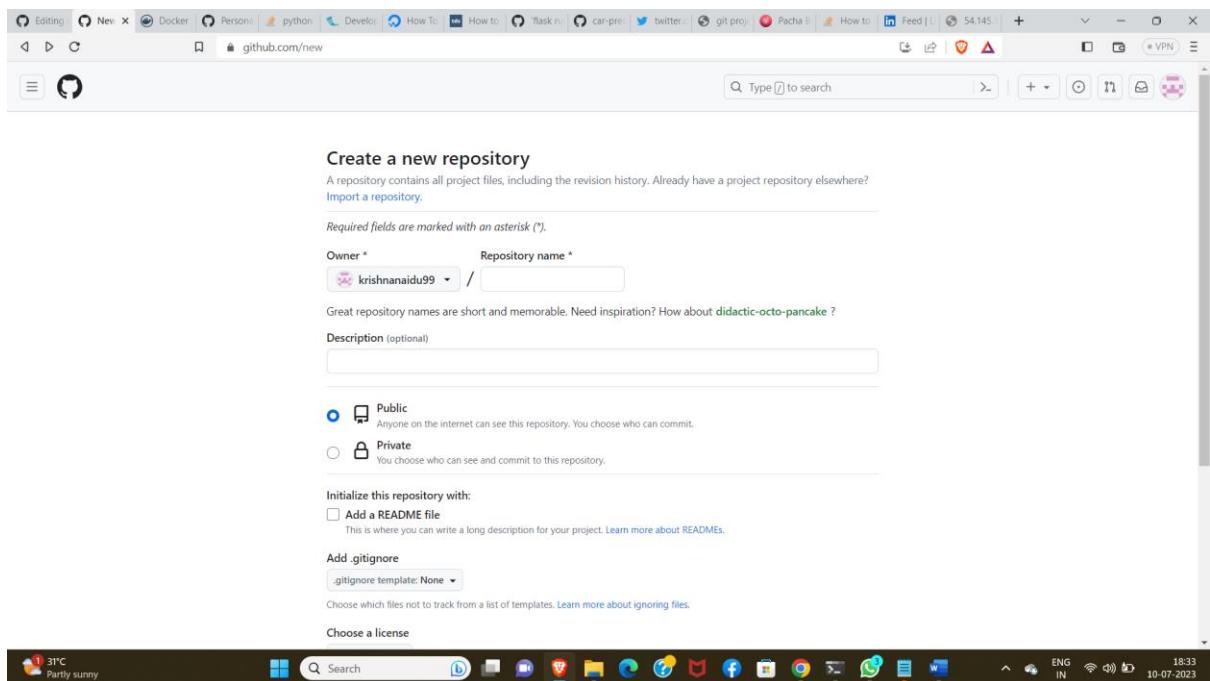
5.now u can see changes in github repo

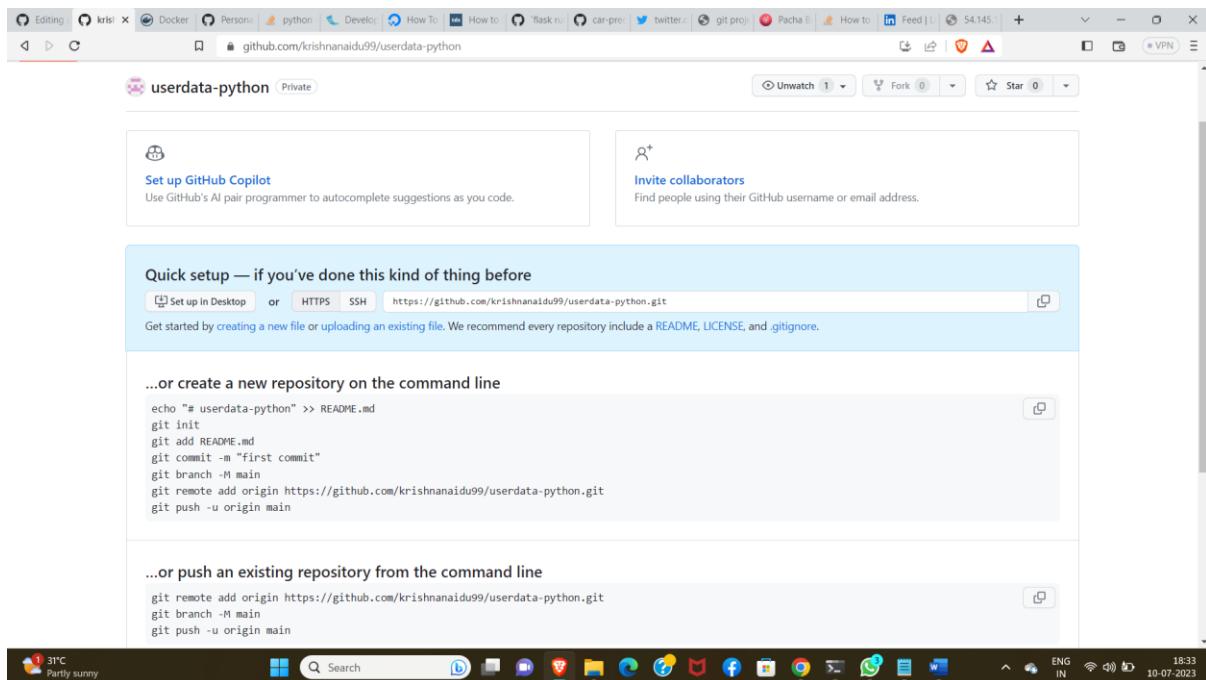


STEP - 3

push the userdata in github private repo

1.create a private repo in github





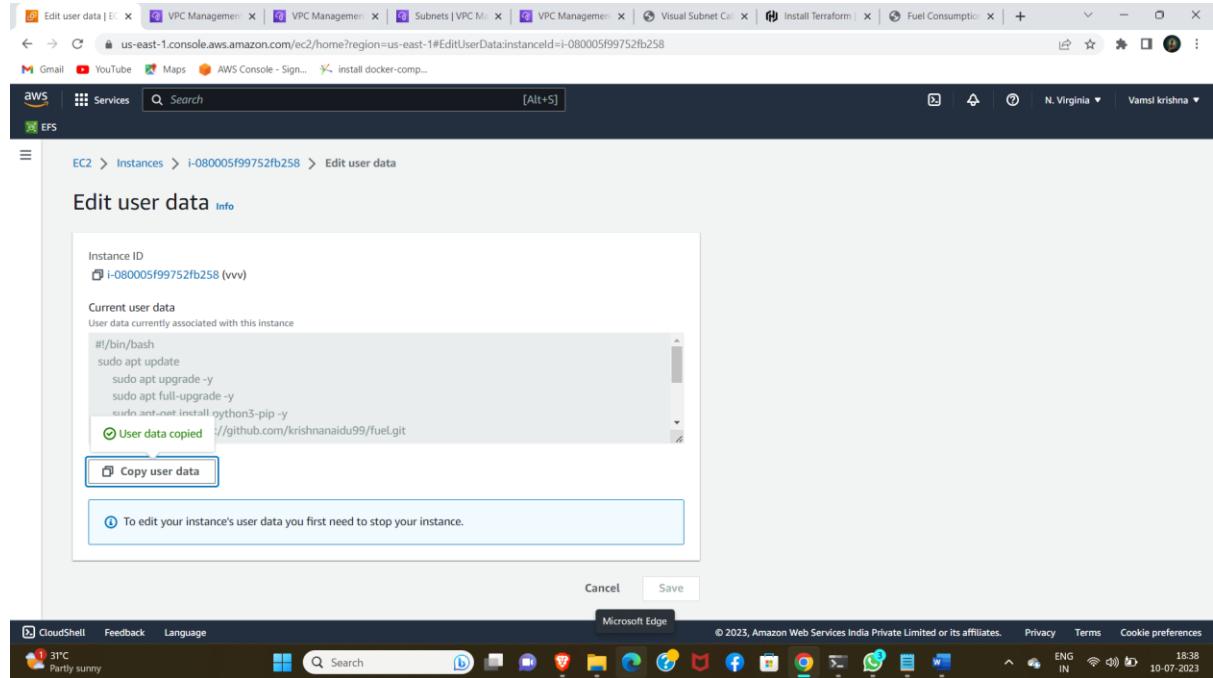
2.clone into local mishene

```
ubuntu@ip-10-0-47-79:~$ ls
ubuntu@ip-10-0-47-79:~$ sudo git clone https://github.com/krishnanaidu99/userdata-python.git
Cloning into 'userdata-python'...
Username for 'https://github.com': krishnanaidu99
Password for 'https://krishnanaidu99@github.com':
warning: You appear to have cloned an empty repository.
ubuntu@ip-10-0-47-79:~$ |
```

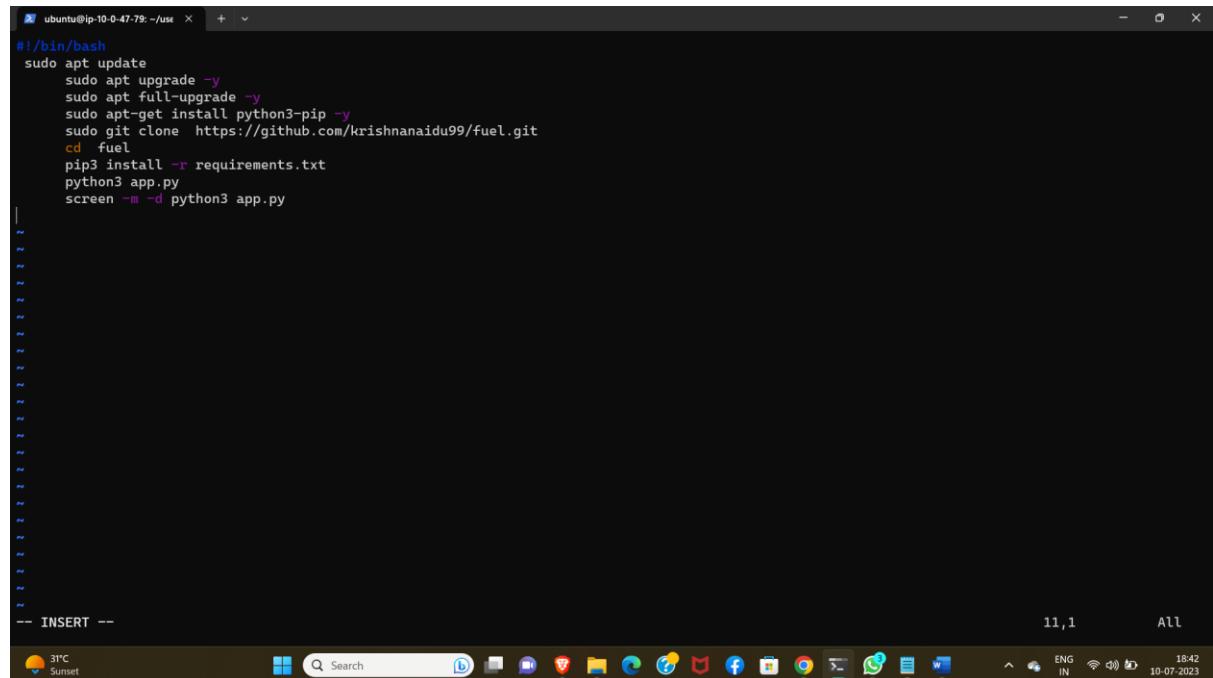
3.go into the repo

```
ubuntu@ip-10-0-47-79:~/userdata-python$ ls
userdata-python
ubuntu@ip-10-0-47-79:~/userdata-python$ cd userdata-python/
ubuntu@ip-10-0-47-79:~/userdata-python$ mkdir userdata.sh
mkdir: cannot create directory 'userdata.sh': Permission denied
ubuntu@ip-10-0-47-79:~/userdata-python$ sudo mkdir userdata.sh
ubuntu@ip-10-0-47-79:~/userdata-python$ ls
userdata.sh
ubuntu@ip-10-0-47-79:~/userdata-python$ cd userdata.sh/
ubuntu@ip-10-0-47-79:~/userdata-python userdata.sh$ |
```

4.Create a vi userdata.sh file copy code into that file



```
#!/bin/bash
sudo apt update
sudo apt upgrade -y
sudo apt full-upgrade -y
sudo apt-get install python3-pip -y
sudo git clone https://github.com/krishnanaidu99/fuel.git
cd fuel
pip3 install -r requirements.txt
python3 app.py
screen -m -d python3 app.py
```



```
#!/bin/bash
sudo apt update
sudo apt upgrade -y
sudo apt full-upgrade -y
sudo apt-get install python3-pip -y
sudo git clone https://github.com/krishnanaidu99/fuel.git
cd fuel
pip3 install -r requirements.txt
python3 app.py
screen -m -d python3 app.py
```

5.add and commit the file

```
ubuntu@ip-10-0-47-79:~/userdata-python$ sudo vi userdata.sh
ubuntu@ip-10-0-47-79:~/userdata-python$ git status
fatal: detected dubious ownership in repository at '/home/ubuntu/userdata-python'
To add an exception for this directory, call:

    git config --global --add safe.directory /home/ubuntu/userdata-python
ubuntu@ip-10-0-47-79:~/userdata-python$ sudo git status
On branch main

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    userdata.sh

nothing added to commit but untracked files present (use "git add" to track)
ubuntu@ip-10-0-47-79:~/userdata-python$ git add .
ubuntu@ip-10-0-47-79:~/userdata-python$ sudo git commit
Aborting commit due to empty commit message.
ubuntu@ip-10-0-47-79:~/userdata-python$ sudo git commit -m"files"
[main (root-commit) c772106] files
 1 file changed, 11 insertions(+)
  create mode 100644 userdata.sh
ubuntu@ip-10-0-47-79:~/userdata-python$ |
```

6. push the file and see changes in github repo

```
1 file changed, 11 insertions(+)
create mode 100644 userdata.sh
ubuntu@ip-10-0-47-79:~/userdata-python$ sudo git push
Username for 'https://github.com': krishnanaidu99
Password for 'https://krishnanaidu99@github.com':
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 375 bytes | 375.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/krishnanaidu99/userdata-python.git
 * [new branch]      main  -> main
ubuntu@ip-10-0-47-79:~/userdata-python$ |
```

The screenshot shows a GitHub repository page for 'userdata-python'. The repository has 1 branch (main) and 0 tags. It contains 1 file, 'userdata.sh', which was created 2 minutes ago. There is 1 commit, c772106, made 2 minutes ago by krishnanaidu99. The repository has 0 stars, 1 watching, and 0 forks. The 'Languages' section shows that the code is written in Shell at 100.0%. The browser's address bar shows the URL: 'github.com/krishnanaidu99/userdata-python'.

STEP - 4

1,create a ec2 instance and install java Jenkins

The screenshot shows the AWS EC2 Instances page. On the left, there's a sidebar with options like EC2 Dashboard, EC2 Global View, Events, Instances, Images, and Elastic Block Store. The main area displays the 'Instance summary for i-0f02a357813e41d56 (jenkins)'. Key details include:

- Instance ID: i-0f02a357813e41d56 (jenkins)
- Public IPv4 address: 54.165.19.32
- Instance state: Running
- Private IP DNS name (IPv4 only): ip-10-0-110-26.ec2.internal
- Instance type: t2.medium
- VPC ID: vpc-0f818858bd46812f6 (vsvk)
- Subnet ID: subnet-014630f472a4c8c58 (mysubnet)

At the bottom, there are tabs for Details, Security, Networking, Storage, Status checks, Monitoring, and Tags.

The screenshot shows the 'Connect to instance' page for the same Jenkins instance. It has tabs for EC2 Instance Connect, Session Manager, SSH client (which is selected), and EC2 serial console. The SSH client section shows the instance ID and provides instructions for connecting via SSH:

- Open an SSH client.
- Locate your private key file. The key used to launch this instance is nani.pem.
- Run this command, if necessary, to ensure your key is not publicly viewable.
chmod 400 nani.pem
- Connect to your instance using its Public IP:
54.165.19.32

A green button labeled 'Command copied' is visible. Below it, a terminal window shows the command: ssh -i "nani.pem" ubuntu@54.165.19.32. A note at the bottom says: 'Note: In most cases, the guessed user name is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI user name.'

```
ubuntu@ip-10-0-47-79:~/usei  x  ubuntu@ip-10-0-110-26:~  x  +  ~
ED25519 key fingerprint is SHA256:oxyf7XilU44LrhqW3j0mVcJ2bnOnq4vghUvGnvyHpwC.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '54.165.19.32' (ED25519) to the list of known hosts.
Welcome to Ubuntu 22.04.2 LTS (GNU/Linux 5.19.0-1025-aws x86_64)

 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
 * Support: https://ubuntu.com/advantage

 System information as of Mon Jul 10 13:23:07 UTC 2023

 System load: 0.1513671875   Processes:           112
 Usage of /: 20.6% of 7.57GB  Users logged in:      0
 Memory usage: 6%            IPv4 address for eth0: 10.0.110.26
 Swap usage:  0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-10-0-110-26:~$
```

```
E: Unable to fetch some archives, maybe run apt-get update or try with --fix-missing?
ubuntu@ip-10-0-110-26:~$ sudo apt update
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease [108 kB]
Get:4 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 Packages [14.1 MB]
Get:6 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [560 kB]
Get:7 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [138 kB]
Get:8 http://security.ubuntu.com/ubuntu jammy-security/main amd64 c-n-f Metadata [10.3 kB]
Get:9 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [538 kB]
Get:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe Translation-en [5652 kB]
Get:11 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [84.5 kB]
Get:12 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 c-n-f Metadata [512 B]
Get:13 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [748 kB]
Get:14 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [133 kB]
Get:15 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [15.7 kB]
Get:16 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 Packages [43.4 kB]
Get:17 http://security.ubuntu.com/ubuntu jammy-security/multiverse Translation-en [9124 B]
Get:18 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 c-n-f Metadata [408 B]
Get:19 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 c-n-f Metadata [286 kB]
Get:20 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [217 kB]
Get:21 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse Translation-en [112 kB]
Get:22 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 c-n-f Metadata [8372 B]
Get:23 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [777 kB]
Get:24 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [197 kB]
Get:25 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 c-n-f Metadata [15.3 kB]
Get:26 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [545 kB]
Get:27 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [85.0 kB]
Get:28 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 c-n-f Metadata [512 B]
Get:29 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [939 kB]
Get:30 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe Translation-en [200 kB]
Get:31 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 c-n-f Metadata [20.6 kB]
Get:32 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 Packages [48.3 kB]
Get:33 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse Translation-en [11.6 kB]
Get:34 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 c-n-f Metadata [608 B]
Get:35 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 Packages [40.9 kB]
Get:36 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main Translation-en [10.2 kB]
Get:37 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 c-n-f Metadata [388 B]
Get:38 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/restricted amd64 c-n-f Metadata [116 B]
```

```
ubuntu@ip-10-0-47-79:~/usei$ ubuntu@ip-10-0-110-26:~$ sudo apt full-upgrade
Reading state information... Done
73 packages can be upgraded. Run 'apt list --upgradable' to see them.
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
The following NEW packages will be installed:
  linux-aws-5.19-headers-5.19.0-1028 linux-headers-5.19.0-1028-aws linux-image-5.19.0-1028-aws linux-modules-5.19.0-1028-aws
The following packages will be upgraded:
  apport bind9-dnsutils bind9-host bind9-libs binutils binutils-common binutils-x86_64-linux-gnu ca-certificates dpkg ec2-hibernation-agent fwupd-signed
  grub-common grub-pc grub-pc-bin grub2-common libhagibis iptables libbinutils libcap2 libcap2-bin libctf-nobfd0 libctf0 libfwupd2 libfwupdplugin5
  libglib2.0-0 libglib2.0-0-bin libglib2.0-data libip4tc2 libip6tc2 libmnl-glbi0 libncurses libncursesw libpam-cap libperl5.34 libpython3.10
  libpython3.10-minimal libpython3.10-stdlib libss4 libtinfo5 libx11-data libxtst6 linux-aws linux-headers-aws linux-image-aws
  mdadm mokutil ncurses-base ncurses-bin ncurses-term open-vm-tools openssl perl perl-base perl-modules-5.34 python3 python3-apport python3-problem-report
  python3-requests python3-software-properties python3.10 python3.10-minimal snapd software-properties-common tzdata ubuntu-minimal ubuntu-server
ubuntu-standard vim vim-common vim-runtime vim-tiny xxd
33 upgraded, 4 newly installed, 0 to remove and 0 not upgraded.
46 standard LTS security updates.
Need to get 123 MB of archives.
After this operation, 282 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 dpkg amd64 1.21.lubuntu2.2 [1239 kB]
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 ncurses-bin amd64 6.3-2ubuntu0.1 [184 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libper5.34 amd64 5.34.0-3ubuntu1.2 [4818 kB]
Get:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 perl amd64 5.34.0-3ubuntu1.2 [232 kB]
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 perl-base amd64 5.34.0-3ubuntu1.2 [1759 kB]
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 perl-modules-5.34 all 5.34.0-3ubuntu1.2 [2977 kB]
Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 ncurses-base-all 6.3-2ubuntu0.1 [20.2 kB]
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libpython3.10 amd64 3.10.6-1-22.04.2ubuntu1.1 [1955 kB]
Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libssl3 amd64 3.0.2-0ubuntu1.10 [1901 kB]
Get:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 python3.10 amd64 3.10.6-1-22.04.2ubuntu1.1 [497 kB]
Get:11 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libpython3.10-stdlib amd64 3.10.6-1-22.04.2ubuntu1.1 [1832 kB]
Get:12 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 python3.10-minimal amd64 3.10.6-1-22.04.2ubuntu1.1 [2262 kB]
Get:13 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libpython3.10-minimal amd64 3.10.6-1-22.04.2ubuntu1.1 [810 kB]
Get:14 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libcurl4 libcurlsew6 amd64 6.3-2ubuntu0.1 [111 kB]
Get:15 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libcurlsew6 amd64 6.3-2ubuntu0.1 [147 kB]
Get:16 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libtinfo6 amd64 6.3-2ubuntu0.1 [185 kB]
Get:17 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libgl20-0-data all 2.72.4-0ubuntu2.2 [4612 B]
Get:18 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libgl20.0-bin amd64 2.72.4-0ubuntu2.2 [80.9 kB]
31°C
Partly sunny
Search
ENG IN
18:57
10-07-2023
```

```
No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-10-0-110-26:~$ sudo apt install openjdk-11-jdk -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  alsavtopology-conf alsaucm-conf at-spi2-core ca-certificates-java dconf-gsettings-backend dconf-service fontconfig-config fonts-dejavu-core
  fonts-dejavu-extra gsettings-desktop-schemas java-common libasound2 libasound2-data libatk-bridge-0.0 libatk-wrapper-java libatk-wrapper-java-jni
  libatk1.0-0 libatk1.0-data libatspi2.0-0 libavahi-client3 libavahi-common-data libavahi-common3 libcupsc2 libdcnf1 libdrm-amdgpu libdrm-intel
  libdrm-nouveau libdrm-radeon libfontconfig libfontenc libglf7 libgl1-amber-dri libglapi-mesa libglvnd libglx-mesa0 libglx0
  libgraphite2-3 libharfbuzz0b libice-dev libice6 libjpeg-turbo8 libjpeg8 liblcms2-2 liblomm5 libpiciaccess0 libpcsc-lite1 libpthread-stubs0-dev
  liblensorss-config liblensorss5 liblens-dev liblens6 liblx11-dev liblxcl liblxau-dev liblxaw7 libxcb-dri2-0 libxcb-dri3-0 libxcb-glx0 libxcb-present0
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/java to provide /usr/bin/java (java) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jjs to provide /usr/bin/jjs (jjs) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/keytool to provide /usr/bin/keytool (keytool) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/rmid to provide /usr/bin/rmid (rmid) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/rmiregistry to provide /usr/bin/rmiregistry (rmiregistry) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/pack200 to provide /usr/bin/pack200 (pack200) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/unpack200 to provide /usr/bin/unpack200 (unpack200) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/lib/jexec to provide /usr/bin/jexec (jexec) in auto mode
Setting up openjdk-11-jre-amd64 (11.0.19+7-1us1-0ubuntu1=22.04.1) ...
Setting up openjdk-11-jdk-headless:amd64 (11.0.19+7-1us1-0ubuntu1=22.04.1) ...
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jar to provide /usr/bin/jar (jar) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jarsigner to provide /usr/bin/jarsigner (jarsigner) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/javac to provide /usr/bin/javac (javac) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/javado to provide /usr/bin/javadoc (javadoc) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/javap to provide /usr/bin/javap (javap) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jcmd to provide /usr/bin/jcmd (jcmd) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jdb to provide /usr/bin/jdb (jdb) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jdeprscan to provide /usr/bin/jdeprscan (jdeprscan) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jdeps to provide /usr/bin/jdeps (jdeps) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jfr to provide /usr/bin/jfr (jfr) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jimage to provide /usr/bin/jimage (jimage) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jinfo to provide /usr/bin/jinfo (jinfo) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jlink to provide /usr/bin/jlink (jlink) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jmap to provide /usr/bin/jmap (jmap) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jmod to provide /usr/bin/jmod (jmod) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jps to provide /usr/bin/jps (jps) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jrunscript to provide /usr/bin/jrunscript (jrunscript) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jshell to provide /usr/bin/jshell (jshell) in auto mode
31°C
Partly sunny
Search
ENG IN
18:58
10-07-2023
```

```

ubuntu@ip-10-0-47-79:~/usei  x  ubuntu@ip-10-0-110-26:~  x  +  ~
Reading package lists... Done
ubuntu@ip-10-0-110-26:~$ sudo apt-get install jenkins
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  net-tools
The following NEW packages will be installed:
  jenkins net-tools
0 upgraded, 2 newly installed, 0 to remove and 0 not upgraded.
Need to get 89.3 MB of archives.
After this operation, 98.4 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 net-tools amd64 1.60+git20181103.0eebece-1ubuntu5 [204 kB]
Get:2 https://pkg.jenkins.io/debian binary/ jenkins 2.413 [89.1 MB]
Fetched 89.3 MB in 8s (11.9 MB/s)
Selecting previously unselected package net-tools.
(Reading database ... 960/75 files and directories currently installed.)
Preparing to unpack .../net-tools_1.60+git20181103.0eebece-1ubuntu5_amd64.deb ...
Unpacking net-tools (1.60+git20181103.0eebece-1ubuntu5) ...
Selecting previously unselected package jenkins.
Preparing to unpack .../archives/jenkins_2.413_all.deb ...
Unpacking jenkins (2.413) ...
Setting up net-tools (1.60+git20181103.0eebece-1ubuntu5) ...
Setting up jenkins (2.413) ...
Created symlink /etc/systemd/system/multi-user.target.wants/jenkins.service → /lib/systemd/system/jenkins.service.
Processing triggers for man-db (2.10.2-1) ...
Scanning processes...
Scanning candidates...
Scanning linux images...

Restarting services...
Service restarts being deferred:
/etc/needrestart/restart.d/dbus.service
systemctl restart networkd-dispatcher.service
systemctl restart unattended-upgrades.service
systemctl restart user@1000.service

No containers need to be restarted.

  31°C  Party sunny  Search  b  f  d  v  e  m  c  o  p  t  w  1902
ENG IN 10-07-2023

```

2, start and enable Jenkins & check status for Jenkins

```

ubuntu@ip-10-0-47-79:~/usei  x  ubuntu@ip-10-0-110-26:~  x  +  ~
Scanning linux images...

Restarting services...
Service restarts being deferred:
/etc/needrestart/restart.d/dbus.service
systemctl restart networkd-dispatcher.service
systemctl restart unattended-upgrades.service
systemctl restart user@1000.service

No containers need to be restarted.

No user sessions are running outdated binaries.

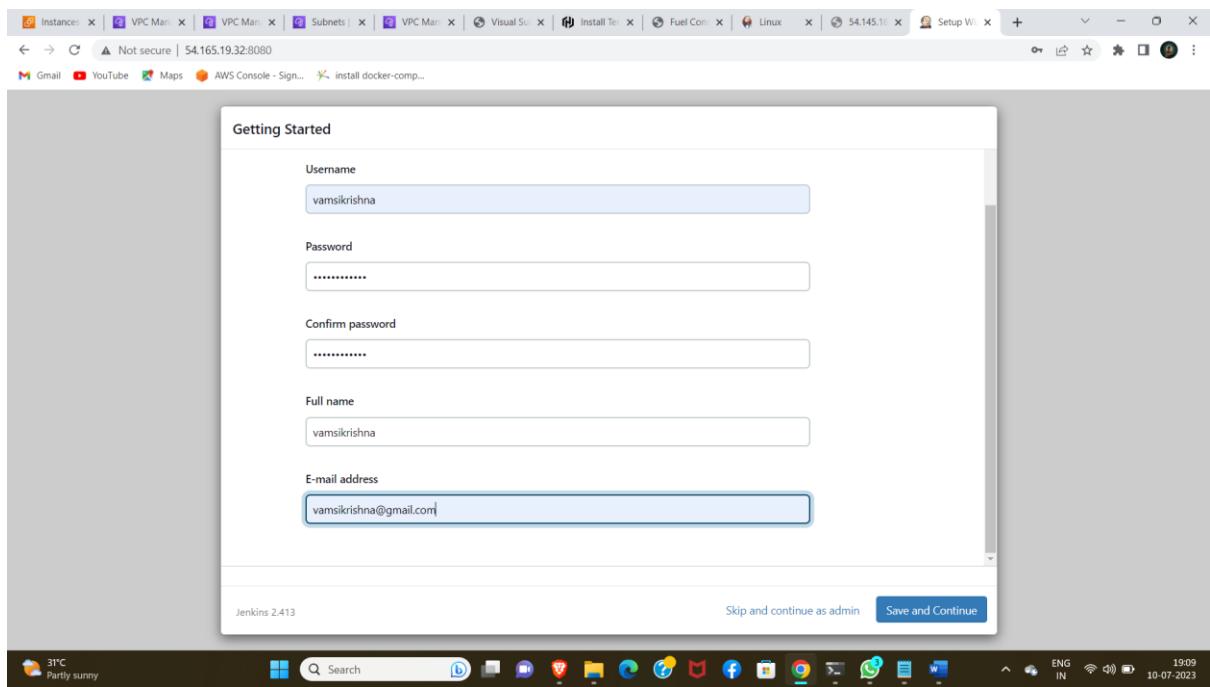
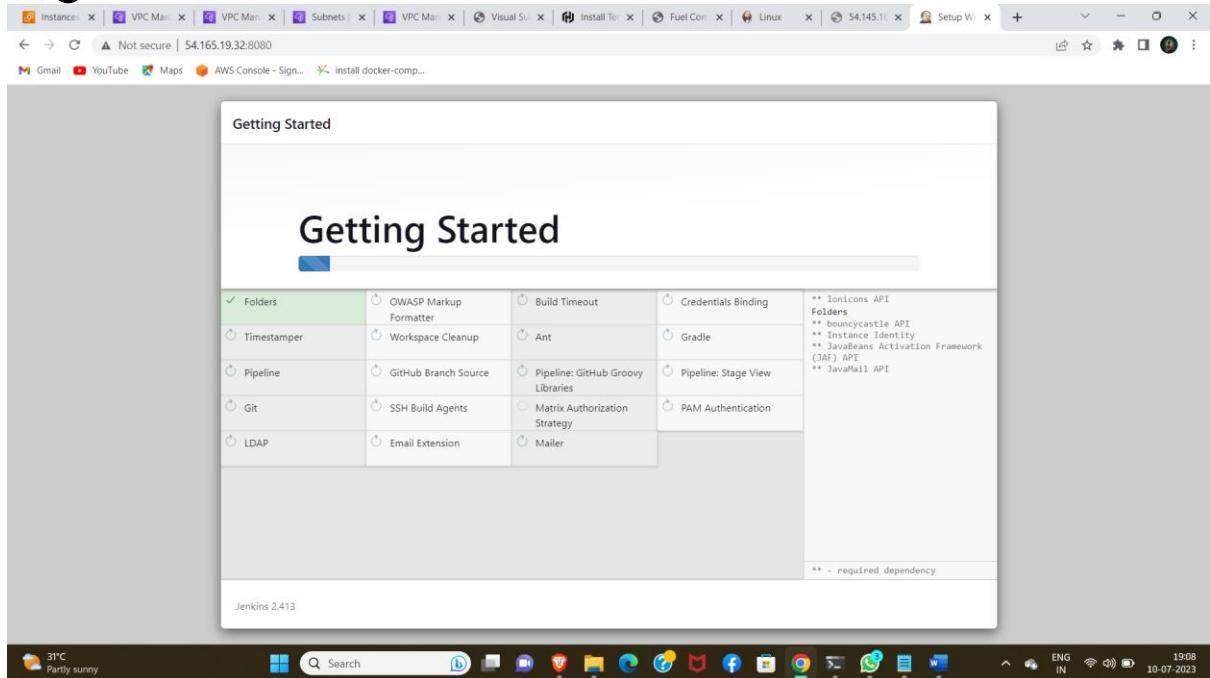
No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-10-0-110-26:~$ sudo systemctl start jenkins
ubuntu@ip-10-0-110-26:~$ sudo systemctl enable jenkins
Synchronizing state of jenkins.service with SysV service script with /lib/systemd/systemd-sysv-install.
Executing: /lib/systemd/system-sysv-install enable jenkins
ubuntu@ip-10-0-110-26:~$ sudo systemctl status jenkins
● jenkins.service - Jenkins Continuous Integration Server
   Loaded: loaded (/lib/systemd/system/jenkins.service; enabled; vendor preset: enabled)
     Active: active (running) since Mon 2023-07-10 13:32:48 UTC; 2min 6s ago
       Main PID: 23852 (java)
          Tasks: 43 (limit: 4686)
        Memory: 1.2G
           CPU: 46.170s
          CGroup: /system.slice/jenkins.service
                  └─23852 /usr/bin/java -Djava.awt.headless=true -jar /usr/share/java/jenkins.war --webroot=/var/cache/jenkins/war --httpPort=8080

Jul 10 13:32:30 ip-10-0-110-26 jenkins[23852]: f800e6d74f654b9990bd56ed256e6cc1
Jul 10 13:32:30 ip-10-0-110-26 jenkins[23852]: This may also be found at: /var/lib/jenkins/secrets/initialAdminPassword
Jul 10 13:32:30 ip-10-0-110-26 jenkins[23852]: ****
Jul 10 13:32:30 ip-10-0-110-26 jenkins[23852]: ****
Jul 10 13:32:30 ip-10-0-110-26 jenkins[23852]: ****
Jul 10 13:32:30 ip-10-0-110-26 jenkins[23852]: 2023-07-10 13:32:48.660+0000 [id=30] INFO Jenkins.InitReactorRunner$1#onAttained: Completed in>
Jul 10 13:32:48 ip-10-0-110-26 jenkins[23852]: 2023-07-10 13:32:48.683+0000 [id=22] INFO hudson.lifecycle.Lifecycle#onReady: Jenkins is fully>
Jul 10 13:32:48 ip-10-0-110-26 systemd[1]: Started Jenkins Continuous Integration Server.
Jul 10 13:32:48 ip-10-0-110-26 jenkins[23852]: 2023-07-10 13:32:48.720+0000 [id=46] INFO h.m.DownloadService$Downloadable#load: Obtained the >
Jul 10 13:32:48 ip-10-0-110-26 jenkins[23852]: 2023-07-10 13:32:48.721+0000 [id=46] INFO hudson.util.Retrier#start: Performed the action chec>
lines 1-28/20 (END)

  31°C  Party sunny  Search  b  f  d  v  e  m  c  o  p  t  w  1904
ENG IN 10-07-2023

```

3.now browse ip address & and install plugins & login Jenkins



4. give sudoers permissions for Jenkins

```

#Defaults:#sudo env_keep += "http_proxy https_proxy ftp_proxy all_proxy no_proxy"
# This allows running arbitrary commands, but so does ALL, and it means
# different sudoers have their choice of editor respected.
#Defaults:#sudo env_keep += "EDITOR"

# Completely harmless preservation of a user preference.
#Defaults:#sudo env_keep += "GREP_COLOR"

# While you shouldn't normally run git as root, you need to with etckeeper
#Defaults:#sudo env_keep += "GIT_AUTHOR_* GIT_COMMITTER_"

# Per-user preferences; root won't have sensible values for them.
#Defaults:#sudo env_keep += "EMAIL DEBEMAIL DEBFULLNAME"

# "sudo scp" or "sudo rsync" should be able to use your SSH agent.
#Defaults:#sudo env_keep += "SSH_AGENT_PID SSH_AUTH_SOCK"

# Ditto for GPG agent
#Defaults:#sudo env_keep += "GPG_AGENT_INFO"

# Host alias specification

# User alias specification

# Cmd alias specification

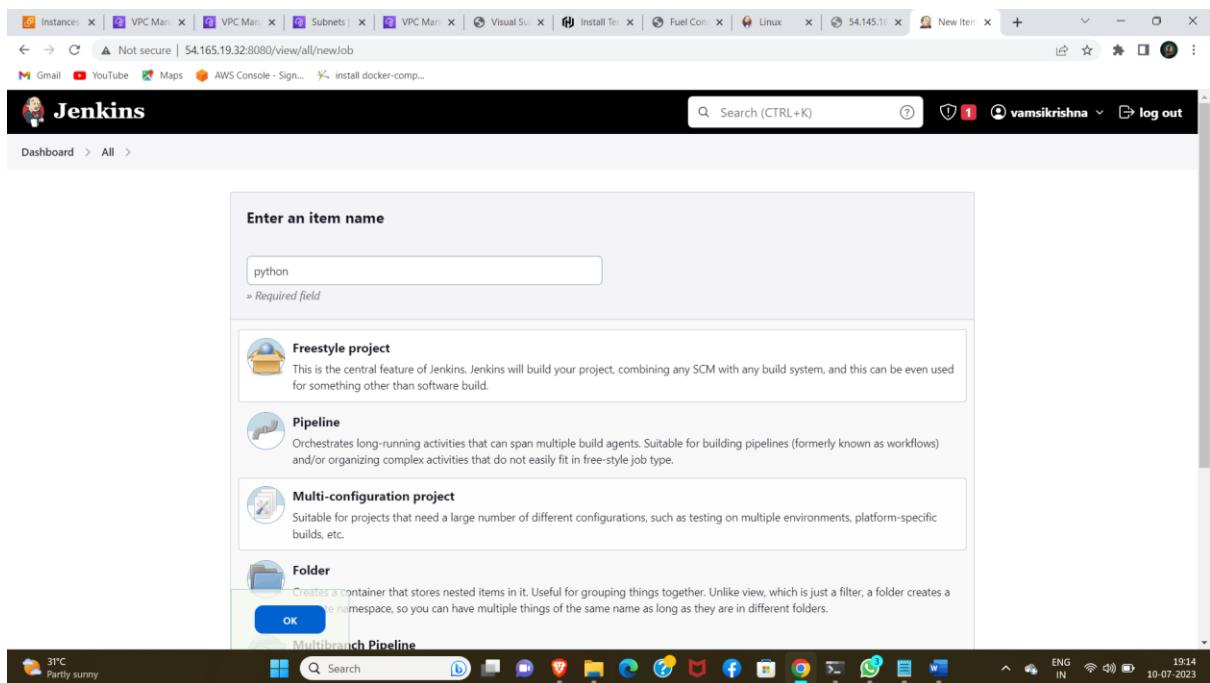
# User privilege specification
root    ALL=(ALL:ALL) ALL
jenkins ALL=(ALL) NOPASSWD:ALL
# Members of the admin group may gain root privileges
%admin  ALL=(ALL) ALL

# Allow members of group sudo to execute any command
%sudo   ALL=(ALL:ALL) ALL

# See sudoers(5) for more information on "@include" directives:
@include /etc/sudoers.d
-- INSERT --

```

5.create a job add git repo& cradictionals &give commands in excute shell



The screenshot shows a GitHub repository page for 'krishnanaidu99/flight-in-private'. The repository is private, has 1 branch ('main'), and 0 tags. The file list includes 'app.py' (last updated now), 'Flight Price Perdition.ipynb', 'OneHotee.joblib', 'Procfile', 'Test_set.xlsx', 'requirements.txt', 'gitattributes', 'model.pkl', 'Data_Train.xlsx', 'templates', and 'price'. A context menu is open over the 'app.py' file, with 'Copied!' highlighted under the 'Clone' section. Other options include 'Local', 'Codepaces (New)', 'HTTPS', 'SSH', 'GitHub CLI', 'Use Git or checkout with SVN using the web URL', 'Open with GitHub Desktop', and 'Download ZIP'. The right sidebar shows 'About' (no description), 'Activity' (0 stars, 1 watching, 0 forks), 'Releases' (no releases), 'Packages' (no packages), and 'Languages' (Python 95.6%, Cython 2.3%).

Configure

Source Code Management

Repository URL: `https://github.com/krishnanaidu99/flight-in-private.git`

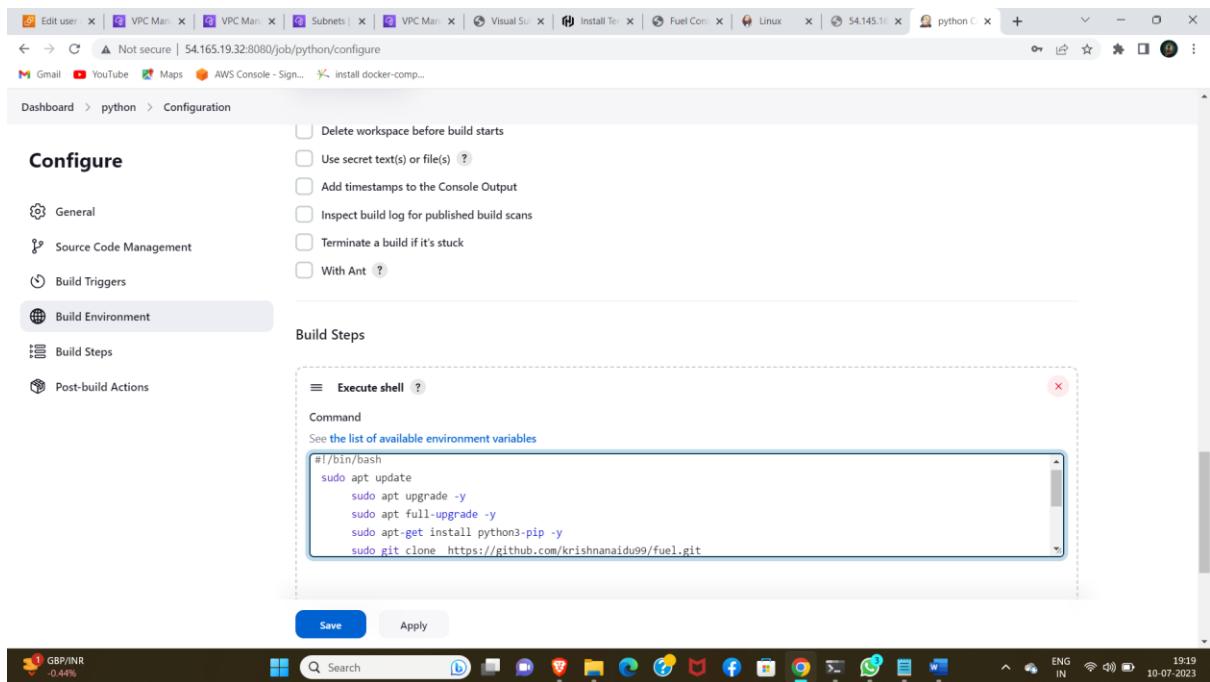
Credentials: `krishnanaidu99/******** (1234)`

Branches to build:

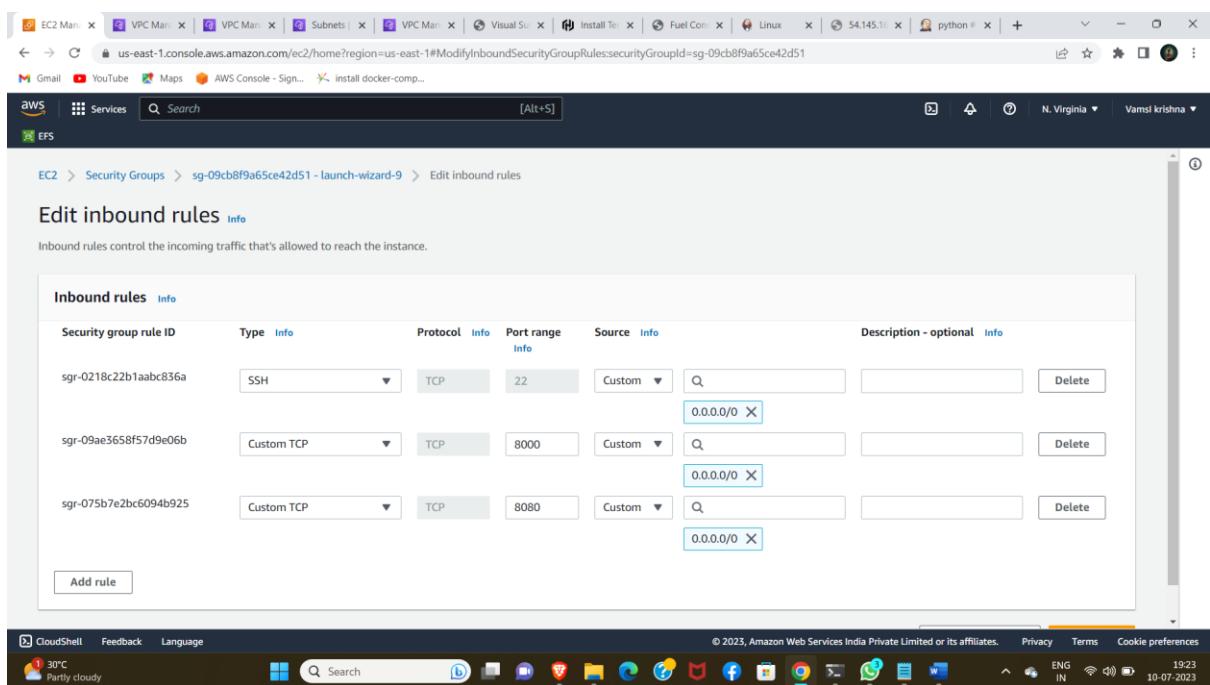
Branch Specifier (blank for 'any'): `*/master`

Save Apply

30°C Near record



6. assain port git repo related in security croups



7. apply and build now and to see output

```

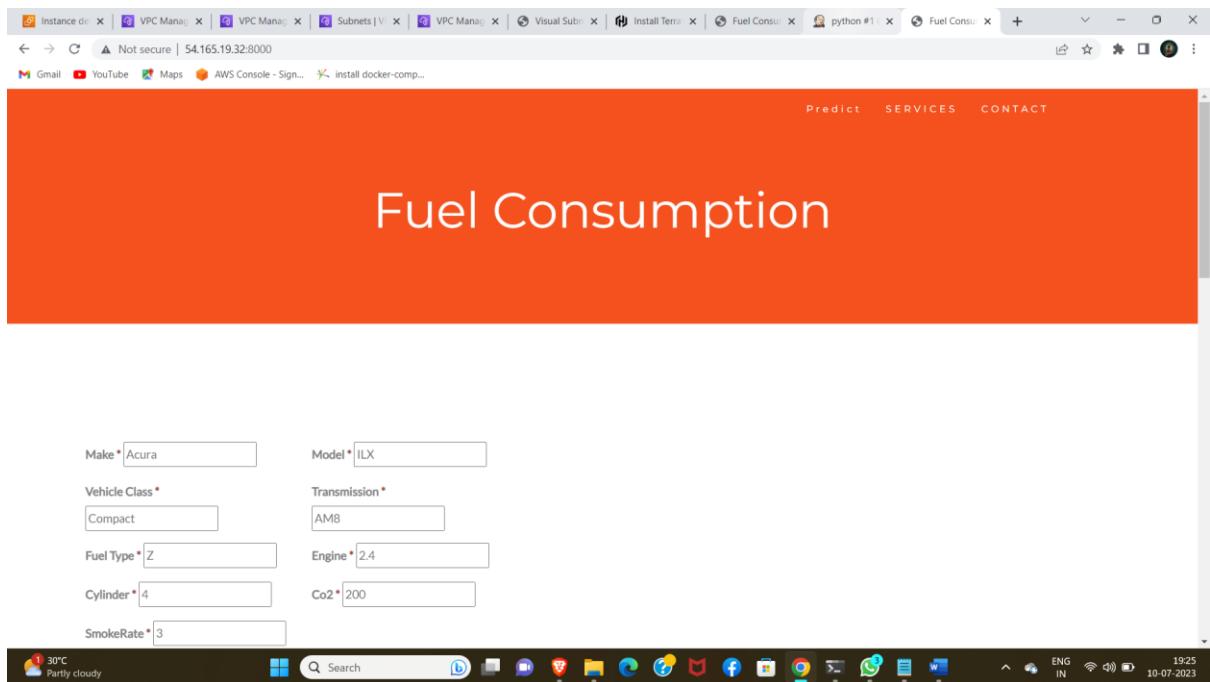
Started by user vamsikrishna
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/python
The recommended git tool is: NONE
using credential aws
Cloning the remote Git repository https://github.com/krishnanaidu99/flight-in-private.git
> git init /var/lib/jenkins/workspace/python # timeout=10
Fetching upstream changes from https://github.com/krishnanaidu99/flight-in-private.git
> git --version # timeout=10
> git -version # 'git version 2.34.1'
using GIT_ASKPASS to set credentials 1234
> git fetch --tags --force --progress -- https://github.com/krishnanaidu99/flight-in-private.git +refs/heads/*:refs/remotes/origin/* # timeout=10
> git config remote.origin.url https://github.com/krishnanaidu99/flight-in-private.git # timeout=10
> git config --add remote.origin.fetch +refs/heads/*:refs/remotes/origin/* # timeout=10
Avoid second fetch
> git rev-parse refs/remotes/origin/main^{commit} # timeout=10
Checking out Revision 1ca984556ea31c0b9f4667f9d0792a57afa7ec2 (refs/remotes/origin/main)
> git config core.sparsecheckout # timeout=10
> git checkout -f 1ca984556ea31c0b9f4667f9d0792a57afa7ec2 # timeout=10
Commit message: "Update app.py"
First time build. Skipping changelog.
[python] $ /bin/bash /tmp/jenkins13227460041183347277.sh

WARNING: apt does not have a stable CLI interface. Use with caution in scripts.

Created wheel for sklearn: filename=sklearn-0.0-py2.py3-none-any.whl size=1310
sha256:18a4dbd432d52a1f3c8509f6661cd371a4c826f074fe6ce317ae9cfbc1272e37
Stored in directory: /var/lib/jenkins/.cache/pip/wheels/9b/13/01/6f3a7fd641f90e1f6c8c7cded057f3394f451f340371c68f3d
Successfully built sklearn
Installing collected packages: pytz, zipp, threadpoolctl, python-dateutil, numpy, MarkupSafe, joblib, itsdangerous, gunicorn, colorama, click, Werkzeug, scipy, pandas, Jinja2, importlib-metadata, scikit-learn, Flask, sklearn
WARNING: The scripts f2py, f2py3 and f2py3.10 are installed in '/var/lib/jenkins/.local/bin' which is not on PATH.
Consider adding this directory to PATH or, if you prefer to suppress this warning, use --no-warn-script-location.
WARNING: The script gunicorn is installed in '/var/lib/jenkins/.local/bin' which is not on PATH.
Consider adding this directory to PATH or, if you prefer to suppress this warning, use --no-warn-script-location.
WARNING: The script flask is installed in '/var/lib/jenkins/.local/bin' which is not on PATH.
Consider adding this directory to PATH or, if you prefer to suppress this warning, use --no-warn-script-location.
Successfully installed Flask-2.2.2 Jinja2-3.1.2 MarkupSafe-2.1.1 Werkzeug-2.2.2 click-8.1.3 colorama-0.4.5 gunicorn-20.0.4 importlib-metadata-4.12.0 itsdangerous-2.1.2 joblib-1.1.0 numpy-1.23.2 pandas-1.4.4 python-dateutil-2.8.2 pytz-2022.2.1 scikit-learn-1.1.2 scipy-1.9.1 sklearn-0.0
threadpoolctl-3.1.0 zipp-3.1
* Serving Flask app 'app'
* Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on all addresses (0.0.0.0)
* Running on http://127.0.0.1:8000
* Running on http://10.0.110.26:8000
Press CTRL+C to quit
* Restarting with stat
* Debugger is active!
* Debugger PIN: 104-872-071

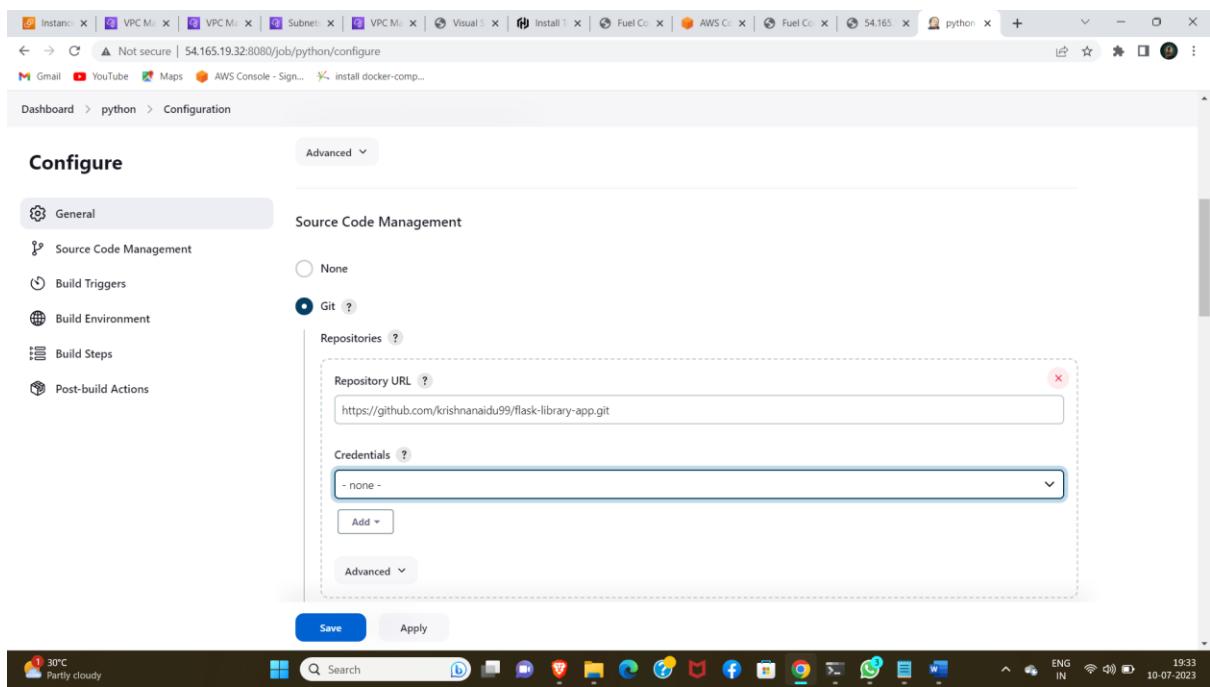
```

8. browse the public ip and to see output In browser



BUILD FLASK PUBLIC REPO

1. change the repo



2. give the commands in execute shell

The screenshot shows the Jenkins configuration interface for a job named 'python'. On the left, there's a sidebar with options like General, Source Code Management, Build Triggers, Build Environment, Build Steps (which is selected), and Post-build Actions. The main area is titled 'Build Steps' and contains a single step named 'Execute shell'. The command field contains the following script:

```

#!/bin/bash
sudo apt update
sudo apt upgrade -y
sudo apt full-upgrade -y
sudo apt-get install python3-pip -y
pip3 install -r requirements.txt
python3 app.py
screen -m -d python3 app.py

```

Below the command field, there's an 'Advanced' dropdown and a 'Save' button.

3.save & build now

The screenshot shows the Jenkins console output for a build labeled '#3'. The left sidebar includes links for Status, Changes, Console Output (which is selected), View as plain text, Edit Build Information, Delete build #3, Git Build Data, and Previous Build. The main content area is titled 'Console Output' and displays the following log output:

```

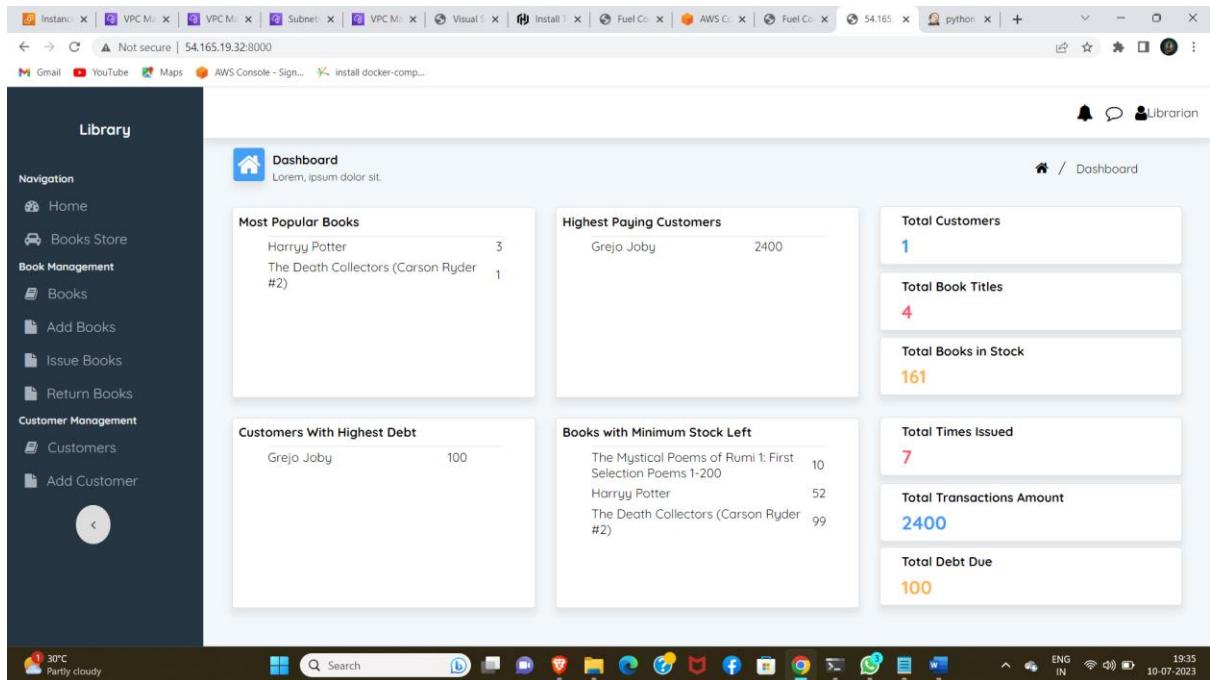
Started by user vamsikrishna
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/python
The recommended git tool is: NONE
No credentials specified
> git rev-parse --resolve-git-dir /var/lib/jenkins/workspace/python/.git # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/krishnanaidu99/flask-library-app.git # timeout=10
Fetching upstream changes from https://github.com/krishnanaidu99/flask-library-app.git
> git --version # timeout=10
> git --version # 'git version 2.34.1'
> git fetch --tags --force --progress -- https://github.com/krishnanaidu99/flask-library-app.git +refs/heads/*:refs/remotes/origin/* # timeout=10
> git rev-parse refs/remotes/origin/main^{commit} # timeout=10
Checking out Revision 2dabc62071b2d6e865954035b5b8d658dd7431b4 (refs/remotes/origin/main)
> git config core.sparsecheckout # timeout=10
> git checkout -f 2dabc62071b2d6e865954035b5b8d658dd7431b4 # timeout=10
Commit message: "Update app.py"
> git rev-list --no-walk 2dabc62071b2d6e865954035b5b8d658dd7431b4 # timeout=10
[python] $ /bin/bash /tmp/jenkins4949865305096850032.sh

WARNING: apt does not have a stable CLI interface. Use with caution in scripts.

```

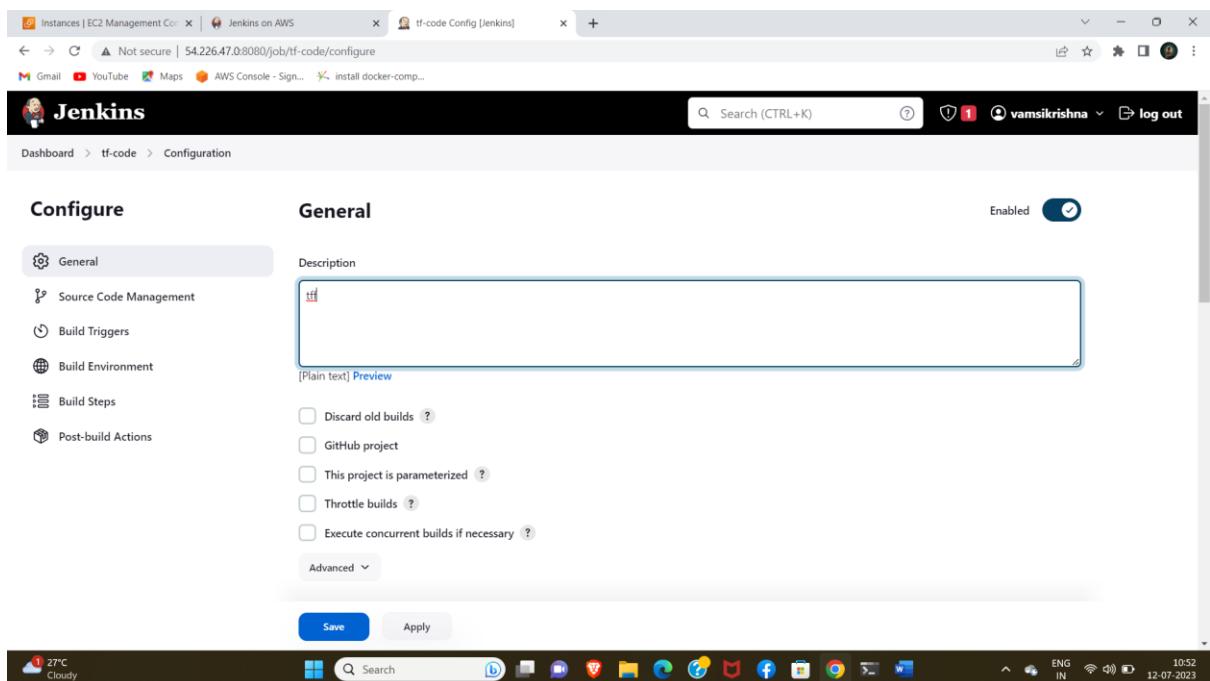
At the bottom, there's a Jenkins navigation bar with links for Home, Jenkins, Help, and Log Out.

4. browse ip and see output



DEPLOY TERRAFORM RESOURCES THROUGH JENKINS

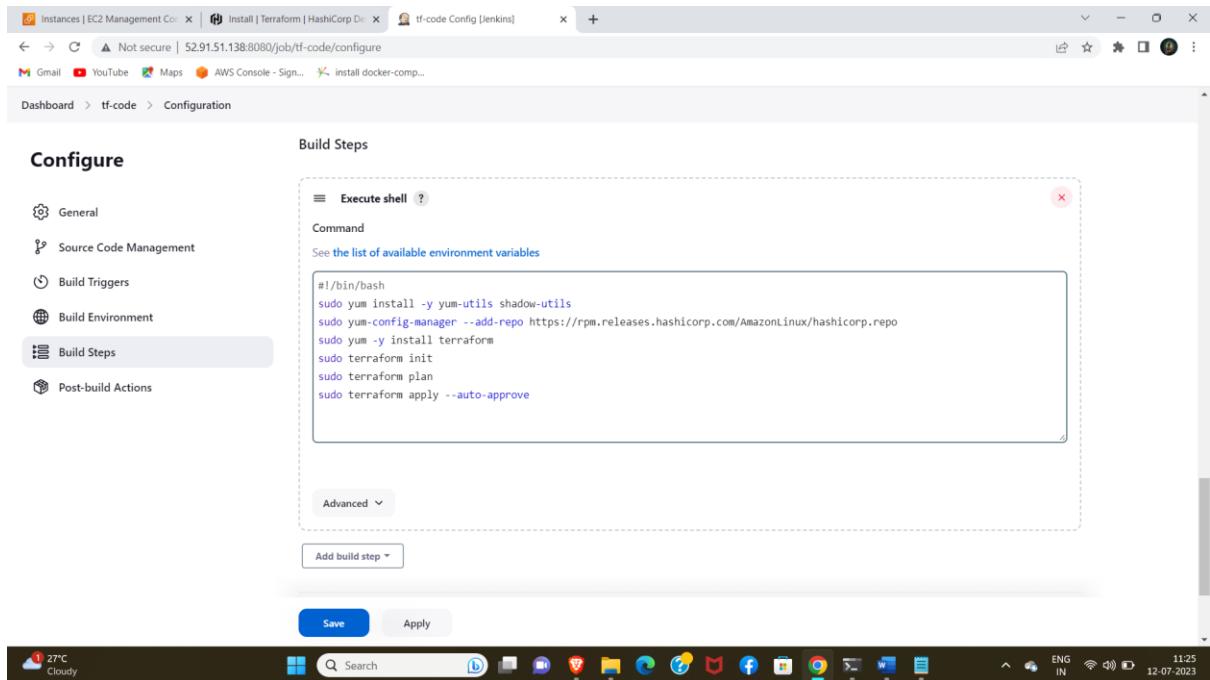
1.create a new job in Jenkins



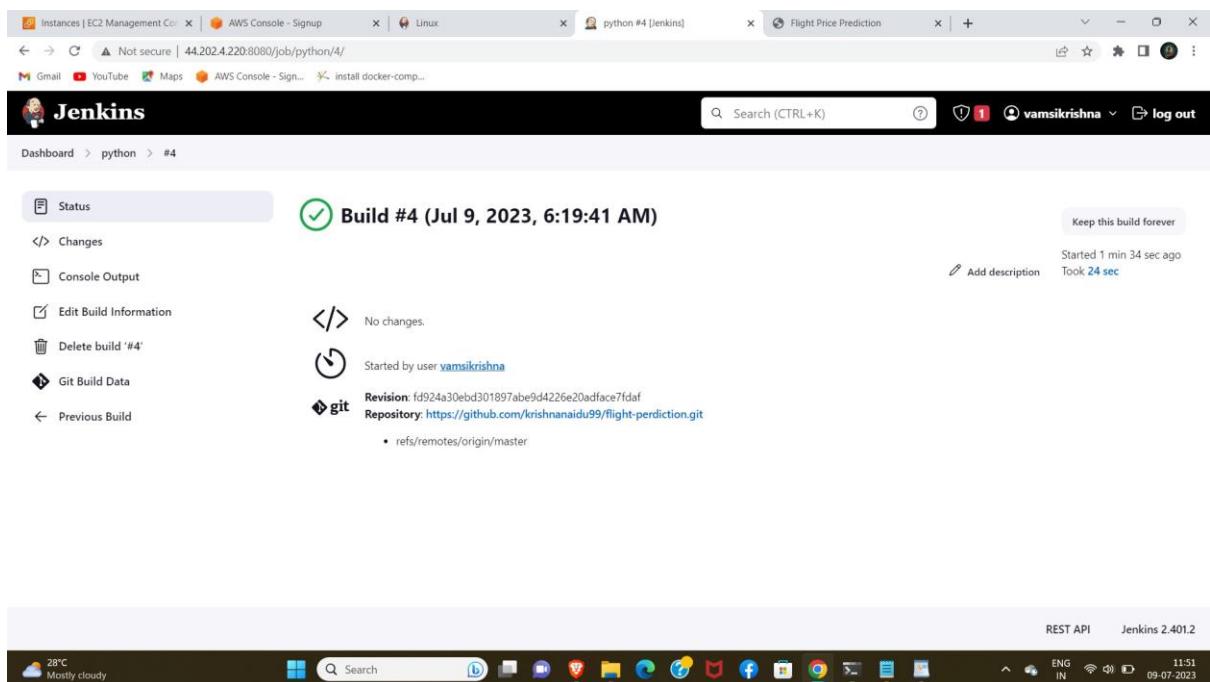
2. Goto github and clone the repo and add the repo and cradictionals in Jenkins

The Jenkins configuration page for the 'tf-code Config [jenkins]' job. Under 'Source Code Management', 'Git' is selected. The 'Repository URL' is set to `https://github.com/krishnanaidu99/python-pip.git`. The 'Credentials' dropdown shows the value `krishnanaidu99/******** (1234)`. The 'Save' and 'Apply' buttons are at the bottom.

3. give terraform installation commands in Jenkins execute shell



5. Now build the job and u got out put



6. check the console and see defaultly created resources

AWS Management Console - Instances | EC2 Management Con... | Install | Terraform | HashiCorp De... | tf-code [Jenkins] | prabjas - Google Search | Instances | EC2 Management Con... | us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances;v=3;\$case=tags:true%5C;client:false;\$regex=tags:false%5C;client:false;sort=tag:Name | Gmail | YouTube | Maps | AWS Console - Sign... | install docker-comp... | N. Virginia | Vamsi krishna | Instances | Services | Search | [Alt+S] | Connect | Instance state | Actions | Launch instances | < 1 > | Tell us what you think

EC2 Dashboard | EC2 Global View | Events | Instances | Instances Types | Launch Templates | Spot Requests | Savings Plans | Reserved Instances | Dedicated Hosts | Scheduled Instances | Capacity Reservations | Images | AMIs | AMI Catalog | Elastic Block Store | CloudShell | Feedback | Language | © 2023, Amazon Web Services India Private Limited or its affiliates. | Privacy | Terms | Cookie preferences | 27°C | Cloudy | 11:37 | 12-07-2023

7. and browse public ip and assign related port and you got output

Instance de | VPC Manag... | VPC Manag... | Subnets | V... | VPC Manag... | Visual Sub... | Install Terra... | Fuel Consum... | python #1 | Fuel Consum... | + | Not secure | 54.165.19.32:8000 | Gmail | YouTube | Maps | AWS Console - Sign... | install docker-comp... | Predict | SERVICES | CONTACT | 30°C | Partly cloudy | Search | 10-07-2023 | 19:25 | ENG IN | 11:37 | 12-07-2023

